



Urban Benchmark

Draft Methodology for public consultation

January 2023

From the end of January until the end of March, the World Benchmarking Alliance (WBA) is holding a global public consultation on the draft methodology for the Urban Benchmark. Interested stakeholders are invited to review the draft and share their comments via the [feedback form](#).

This consultation is part of WBA's continuous stakeholder engagement process. It builds on earlier presentations and meetings with a wide range of stakeholders. A set of numbered consultation questions for which we seek explicit feedback is outlined in this document and listed in the feedback form. We also welcome feedback on any other aspect of the document.

For more information, please email info.urban@worldbenchmarkingalliance.org



Contents

About WBA and the seven systems transformations	6
Benchmarking for a better world	6
Seven systems transformations	6
Benchmark development: a multi-stakeholder process	7
Methodology development and public consultation	7
Data collection	8
Data analysis	8
The Urban Benchmark.....	9
Defining the urban transformation	9
Closing the corporate accountability gap	10
The urban development life cycle	10
Approach to scoring and weighting	13
Industry and company selection.....	15
Keystone company selection	15
Selecting companies by region	15
Industry distribution	16
Indicators for the Urban Benchmark	17
Governance and Strategy	17
1. <i>Urban transformation strategy</i>	18
2. <i>Accountability for urban transformation strategy</i>	19
Inclusiveness	20
3. <i>Affordability</i>	20
4. <i>Accessibility</i>	21
5. <i>Participatory</i>	22
6. <i>Land Rights and Cultural Heritage</i>	23
Safety and Resilience	24
7. <i>Safety and Security</i>	24
8. <i>Disaster Risk Reduction</i>	25
9. <i>Early Warning and Emergency Response Systems</i>	26
10. <i>Climate Change Adaptation</i>	27
Sustainability	28
11. <i>Emissions Reduction</i>	28



12. <i>Water Efficiency</i>	29
13. <i>Plastic Use and Waste Reduction</i>	30
14. <i>Natural Ecosystems Protection</i>	31
Vibrancy and Compactness	32
15. <i>Public Space Provision</i>	32
16. <i>Pedestrian Connections</i>	33
References	34
Annexes	39
Annex I. Full company list	39
Annex II. Benchmarks, standards and frameworks relevant to the Urban Benchmark ...	50
Annex III. Urban Benchmark indicators and industries, by SDGs and NUA targets	57
Annex IV. Urban and rural populations	66
Annex V. The world’s megacities in 2035	67
Annex VI. Glossary	68



Note to reader

The critical role of urbanisation came to the forefront of policy debates in the past few decades, notably with the first United Nations Conference on Human Settlements (Habitat I) held in 1976. The world has seen a rising level of urbanisation over the past couple of centuries, with most of the growth occurring in the past few decades. Urbanisation is therefore one of the most defining and transformative demographic trends of the 21st century.

In 2015, all UN member states adopted the 2030 Agenda for Sustainable Development. As part of the 17 Goals agreed upon, SDG 11, on Sustainable Cities and Settlements, vowed to make cities and human settlements inclusive, safe, resilient, and sustainable. One year after the adoption of the SDGs, Habitat III was conducted in 2016 and adopted the New Urban Agenda (NUA). The NUA calls for inclusive cities that leave no one behind, leveraging the economic opportunities that arise from well-planned urbanisation, and ensuring environmental sustainability and urban resilience. These key words form the heart of what we see as urban transformation.

There are various benchmarks, standards, and indicators related to the urban transformation, but very few specifically apply to companies. The World Benchmarking Alliance (WBA) is thus developing the Urban Benchmark to measure and track how the world's most influential companies operating in the urban space are helping to make cities and urban areas more inclusive, safe, resilient, environmentally sustainable, and spatially vibrant and compact, as mandated by the SDGs and NUA.

The benchmark will assess 415 the world's most influential companies operating in the urban space. These companies are spread proportionately across the world's regions, focusing on presence and impact in the world's megacities that accommodate 10 million residents or more. They cover key industries in the realm of urban transformation: real estate developers and managers, design, engineering and construction companies, passenger transport and consumer logistics companies, and power, water, and waste management utilities.

These companies are part of WBA's SDG2000 list of the 2,000 most influential companies for the achievement of the SDGs. The draft methodology explains the industry and company selection process and how those companies will be assessed. It also presents a draft list of the companies to be benchmarked. Five urban-specific measurement areas have been identified and will be used to assess the companies: (1) Governance and Strategy, (2) Inclusiveness, (3) Safety and Resilience, (4) Sustainability, (5) Vibrancy and Compactness. In complement to this, the Core Social Indicators will also be assessed, keeping people at the core of all our transformations.

WBA aims to publish the final methodology of the Urban Benchmark by the second quarter of 2023, following a public consultation process.



About WBA and the seven systems transformations

The World Benchmarking Alliance is building a movement to increase the private sector's impact towards a sustainable future for all. In 2015, the UN set out an enormously ambitious and transformational plan of action for people, planet and prosperity. The 17 Sustainable Development Goals (SDGs) demonstrate the scale and ambition of this agenda, stimulating action in areas of critical importance to humanity and the planet.

The private sector has a crucial role to play in advancing the SDGs and contributing to the systems transformations needed, but this requires real change in the way that the impact of business is measured to boost motivation and stimulate further action. Together with Allies from the public sector, industry, business, financial institutions, and civil society, WBA is developing transformative benchmarks to measure companies' progress against the global challenges we all face.

Benchmarking for a better world

The benchmarks demonstrate to companies and their stakeholders where they stand compared to peers and where they can improve. This information provides business and stakeholders with a roadmap for the transformations ahead, showing how sectors can positively leverage their influence and where action is urgent. The benchmarks are informed by best available science and build on existing norms, standards, frameworks and initiatives.

They are free for everyone to use and are continually improved through open and inclusive multi-stakeholder dialogue. By virtue of being public, the benchmarks empower all stakeholders, from consumers and investors to employees and business leaders, with key data and insights to encourage sustainable business practices across all sectors.

Seven systems transformations

WBA has identified seven systems transformations that are needed to put our society and economy on a more sustainable path (Figure 1). The transformations offer a strategic framework to develop benchmarks and identify keystone companies that are vital for achieving the SDGs.

FIGURE 1. SEVEN SYSTEMS TRANSFORMATION



WBA focuses on keystone companies (the SDG2000) with the greatest potential to positively or negatively impact the systems in which they operate. The SDG2000 span public, private and state-owned companies and represent USD 46 trillion in collective revenues. The companies are spread across 80 countries and directly employ over 100 million people, with a quarter of the companies headquartered in developing, emerging or frontier markets. By 2024, WBA will assess and rank the performance of these 2,000 companies across the seven systems transformations.

Benchmark development: a multi-stakeholder process

This benchmark will be published in accordance with [WBA’s benchmark cycle](#), from methodology development to data collection and analysis to benchmark publication. Public consultation on this draft methodology for the 2023-24 Urban Benchmark kickstarts this process, leading to the publication of the first iteration in 2024. Throughout the process, companies will be informed about key engagement opportunities, updated timelines and development updates.

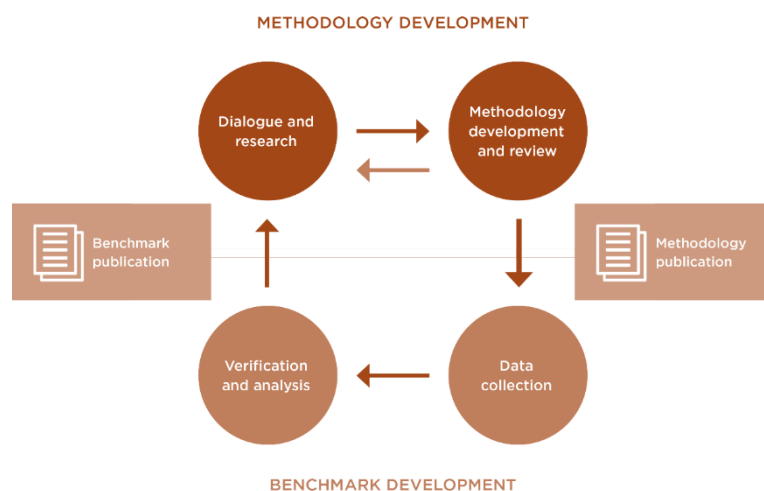


FIGURE 2. METHODOLOGY DEVELOPMENT

Methodology development and public consultation

To allow a broader group of stakeholders to provide feedback on the draft methodology, this consultation document is published on January 31st, 2023, for an eight-week period. At the same time, we will set up the Expert Review Committee (ERC) which will convene to discuss the draft methodology and provide guidance on the key questions outlined. Based on feedback from the public consultation and the ERC’s advice, the methodology will be finalised and published by the second quarter of 2023.

Benchmarking will be carried out every two years and will go through a revision process followed by a public consultation - as explained above - at the beginning of the next benchmarking cycle. During this process, the criteria may be updated. The urban transformation is a rather novel field in which companies are benchmarked. Thus, as awareness of this transformation expands, the indicators where there was limited availability of high quality data, may experience growth and improved data. Hence, the criteria will be updated biannually, to appropriately reflect the growth in this field.



Data collection

Data collection for the benchmark is due to start in 2024. During the research phase, we will remain available to explain the methodology and criteria that need to be met to receive scores against the indicators. The data collection process will be different from that of other benchmarks. To insure we keep track of location specificities, WBA will work with six regional research partners in the following world regions: (1) the Americas, (2) Europe and Central Asia, (3) the Middle East, North Africa, and Sub-Saharan Africa, (4) South Asia, (5) East Asia, and (6) Southeast Asia and the Pacific.

The assessment will be based on a range of publicly available sources such as financial reports, social responsibility reports, and sustainability reports. Information is also sourced from relevant company web pages. The documents to be used will be, as first priority, taken from the latest fiscal year (2022), but information from previous cycles, going back until the year ending in 2021 will also be used. It is important to note that only publicly available information disclosed in English will be taken into consideration.

Many of the indicator criteria have been designed in reference to publicly available information, enhancing the likelihood of availability and the transparency of the process. Nevertheless, companies in scope will have the opportunity to contribute with additional information, through partially pre-populated questionnaires on WBA's Survey Tool. Companies that choose not to complete the questionnaire will be evaluated based solely on publicly available information and will not be able to influence or appeal their final scores.

Data analysis

Analysis of the data is overseen by WBA's Urban research team. Our researchers will be analysing the data at an institutional and industry level, to ensure that accurate data is found for all relevant areas of the methodology and assessed in an impartial and transparent way. For verification purposes, the researchers conduct an extensive quantitative and qualitative check of each indicator for each company. Scoring guidelines will be improved, if necessary, in consultation with our experts and the ERC and published with the benchmark results. In this way, all stakeholders can see not just what we assessed (the methodology) but how each score was produced (scoring guidelines).

As we finalise our assessments, we will share them with each of the companies in scope and request their feedback, allowing them to engage on their individual assessments. All companies will be contacted and invited to comment during the research phase. Companies can share additional information they are willing to make public through the benchmark, to complement WBA's assessment based on publicly disclosed corporate information. Companies that do not respond or decline to participate in the research phase will not be entitled to appeal their results and will have to wait for the next benchmark cycle to input information.



The Urban Benchmark

Urbanisation at a rapid pace has been one of the most defining and transformative demographic trends of the 21st century. This is particularly evident in East Asia, South Asia, and Sub-Saharan Africa, regions that also concentrate most of the people living below the poverty line (SDG Network, 2013). The world's urban population grew four-fold from 0.8 billion people in 1950 to 4.22 billion in 2018. Approximately 55% of the world's total population now lives in urban areas. This figure is expected to increase even further in the future, with the urban population projected to reach 6.68 billion by 2050 (UNDESA, 2018).

The Urban Benchmark will assess how companies are helping to make cities and urban areas more inclusive, safe, resilient, as well as environmentally and spatially sustainable, as mandated by the Sustainable Development Goals (SDGs) and the New Urban Agenda (NUA). Company policies, activities, products and services, as well as reporting will be evaluated under six measurement areas: governance and strategy, inclusiveness, safety and resilience, environmental sustainability, vibrancy and compactness, and social transformation.

Defining the urban transformation

The critical role of urbanisation came to the forefront of policy debates in the past few decades, especially since the first United Nations Conference on Human Settlements (Habitat I) in 1976. When well-planned and managed, urbanisation can accelerate poverty reduction, namely by providing more opportunities for employment, better services and amenities, and thus higher quality of life (UNDESA, 2020). However, without proper planning and management, urbanisation could easily lead to overcrowding, poor health, evictions, deepened inequalities, and depleted environment. It is thus critical that urbanisation is done in ways that are inclusive, safe, resilient, and sustainable, while creating economic and social opportunities for all.

The world has seen a rising level of urbanisation over the past couple of centuries. But the fastest growth has occurred in the past few decades. The UN estimates that in 1960, there were twice as many people who lived in rural areas (about two billion people) as opposed to urban areas (about 1 billion), globally. Since 2007, however, more than half of the world population has been living in urban areas, and this figure has further increased to 55 percent, or about 4.3 billion people, by 2017 (UNDESA, 2018).

In many high-income and upper-middle income countries, urbanisation coincided with industrialization. The development of manufacturing industries in the 19th and 20th century required many workers who shifted from rural areas and left their agriculture jobs to work in higher paying jobs in factories. This happened, for example, in Europe, the United States, Japan, and more recently, China. In lower-income countries, however, the pace in which labour-intensive jobs are created do not match the pace of urbanisation. This has resulted in people moving to cities without having secured jobs or proper places to live, ending in overcrowded settlements with little to no services, and often without secure tenure.



In 2015, all UN member states adopted the 2030 Agenda for Sustainable Development. As part of the 17 Goals agreed upon, SDG 11, on Sustainable Cities and Settlements, vowed **to make cities and human settlements inclusive, safe, resilient, and sustainable**. One year after the adoption of the SDGs, Habitat III was conducted in 2016 and adopted the NUA. The NUA calls for inclusive cities that leave no one behind, **leveraging the economic opportunities that arise from well-planned urbanisation**, and ensuring environmental sustainability and urban resilience. These key words form the heart of what we see as urban transformation.

Closing the corporate accountability gap

So far, there are several standards and benchmarks that apply to cities and urban-related projects, but very few that specifically apply to companies in the urban transformation realm. Various private consulting groups have developed indices for cities, like Sustainable Cities Index and Liveable Cities Index, with others exploring more specific aspects, such as the Safe Cities Index, Resilient Cities Index, Multicultural Cities Index, and Urban Transport Benchmarking. Some national governments have also developed and adopted different versions of these indices to measure how their cities are contributing to the SDGs.

However, the frequency of publication varies greatly and the results are not always publicly available and depend on whether or not the cities want to disclose their performance. An exception to this could be the Global Real Estate Sustainability Benchmark (GRESB)'s Real Estate Assessments and Infrastructure Assessments (GRESB, 2022). The aforementioned includes annual assessments that cover multiple aspects of urban transformation, focusing on environmental, social and governance (ESG), for real estate companies and infrastructure assets.

The International Organization for Standardization (ISO) has set forth the ISO 37120 – Sustainable cities and communities, ISO 37122 – Smart cities, and ISO 37123 – Resilient cities (ISO, 2018). Also, the U.S. Green Building Council has the LEED (Leadership in Energy and Environmental Design) certification for cities and communities (projects) (US Green Building Council, 2021), that are both existing and under planning and design. Similarly, the Institute for Human Rights and Business (IHRB) has a Framework for Dignity in the Built Environment that applies to policies and projects (IHRB, 2018).

The Urban Benchmark aims to fill this accountability gap by developing a benchmark that looks at companies from various industries relevant to the urban transformation and measure them in a comprehensive way, covering multiple aspects as envisioned by the SDGs and NUA.

The urban development life cycle

While it can be argued that many companies in the SDG2000 operate in cities, not all are equally influential in ensuring urban areas contribute to the achievement of the 2030 Agenda, the NUA, and the Paris Agreement. The Urban Benchmark focuses on companies that play a key role in the urban development life cycle, to borrow from the building life cycle framework. Urban areas, as well as the infrastructure, buildings, facilities, and networks therein are essentially the built environment that are initiated, planned and designed, constructed, connected, operated, and ultimately demolished and redeveloped by humans.



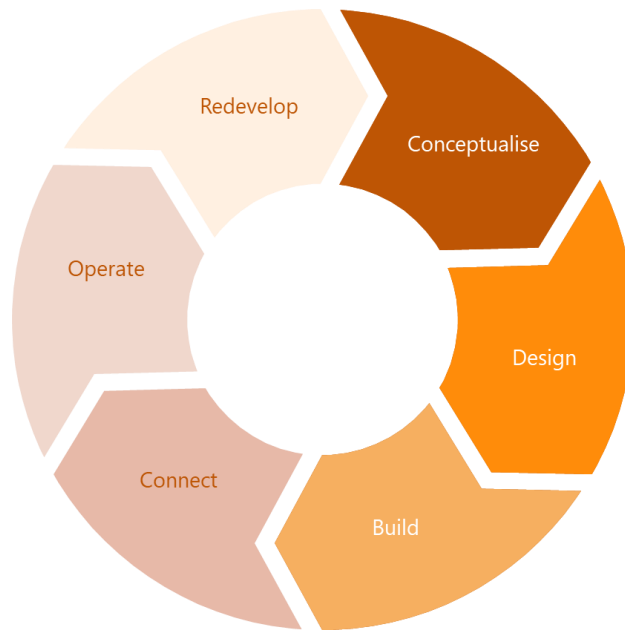


FIGURE 3. URBAN DEVELOPMENT LIFECYCLE

We use the above urban development life cycle to select the industries key to this process. As explained in the following table, the selected key industries are real estate, design and engineering, construction, transportation, logistics, and utilities (power, water, waste management, telecommunications). The table also contains more detailed descriptions regarding relevant sub-industries.



TABLE 1. URBAN DEVELOPMENT LIFECYCLE AND KEY INDUSTRIES

Stage in the Life Cycle	Key Industries
<p>Conceptualisation: First, the development of urban infrastructure, buildings, facilities, and networks is typically initiated and conceptualised by landowners and property (real estate) developers. These can be private, public, or state-owned companies.</p>	<p>Real estate developers and investors</p>
<p>Planning and design: Next, these ideas are brought forward to a planning and design stage. Here, the phases of development are defined, as well as the shape and function, as well as how the development will be operated, is decided together by the planners, designers, and developers. Whether green building or transit-oriented development principles or disaster risk reduction will be adopted, for example, is decided here.</p>	<p>Planning, design, and engineering services</p>
<p>Construction: Once the plans and designs are in place, they are built according to the specifications. Sometimes certain social, environmental, and physical conditions on site may not have been entirely taken into consideration during the planning and design stage. In this case, the companies in charge of construction need to decide, together with the planners and developers, certain adjustments on the spot.</p>	<p>Construction services</p>
<p>Connection: Buildings and facilities do not operate in Isolation. They accommodate activities that interact with other areas, buildings and facilities. The operation of the built environment depends on how well they are served by mobility networks (i.e., roads and public transport routes), either to transport people or goods.</p>	<p>Transportation services (serving passengers in urban areas, excluding long-distance and international travels), Logistics services (excluding B-to-B bulk and overseas shipping)</p>
<p>Operation: Buildings and facilities are managed on a day-to-day basis by third-party property management companies or the immediate owners. They also need to be serviced by utilities and telecommunications providers to operate in full capacity. These companies play a key role in ensuring the safety, security, and disaster preparedness of the built environment and its network.</p>	<p>Real estate management services, Utilities (including electricity, water and waste management providers) Telecommunications services</p>
<p>Redevelopment: At the end of the lifecycle, infrastructure goes through a process of partial or total redevelopment. At this point the lifecycle comes to full circle.</p>	<p>Construction services, Real estate developers and investors</p>



Approach to scoring and weighting

The Urban Benchmark evaluates company performance across six measurement areas. The first five are: (1) the company's overall governance and strategy towards the SDGs and the NUA, (2) inclusiveness, (3) safety and resilience, (4) sustainability, and (5) vibrancy and compactness. Altogether these first five measurement areas are composed of 16 indicators.

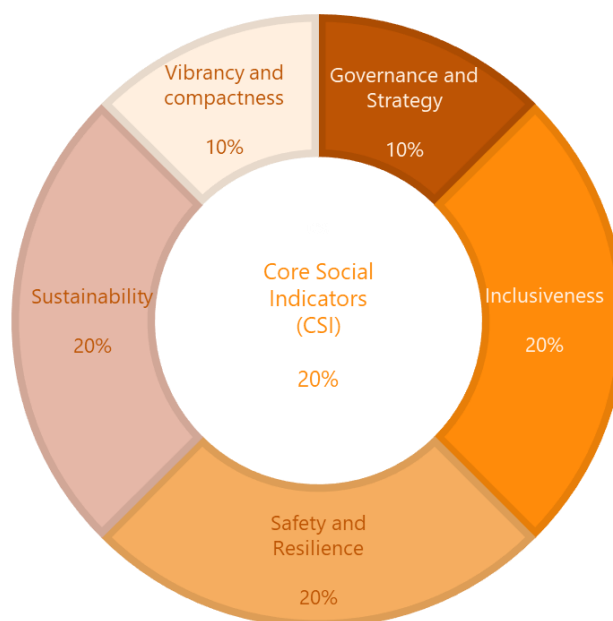


FIGURE 4. MEASUREMENT AREAS

The five urban-specific measurement areas are made up of 16 indicators, each having the same weight. Thus, the measurement areas that have 2 indicators have a combined weight of 10%, those that have 4 indicators 20%, and the CSI 20%.

We have found no empirical evidence to suggest that one indicator is more critical than others within a measurement area, thus each of the indicators carries the same weight. All scoring elements will be added to reach the score of the indicator. Then, the scores for each indicator are added to identify the score of the measurement area. Again, each indicator carries the same (equal) weight towards the score of the measurement area, which carry different weights towards the final score in the assessment.

Along with these Urban Benchmark-specific measurement areas, we will include as sixth measurement area WBA's Core social indicators (CSI), which are embedded across all our benchmarks. These indicators represent fundamental requirements on: (1) respect for human rights, (2) provision of decent work, and (3) acting ethically. While these indicators are designed to be industry-agnostic and are crucial for all sectors, some are particularly relevant to industries that affect local stakeholders and communities, and therefore fit particularly well within the scope of the Urban Benchmark. A table summarising these 16 indicators and how they relate to the urban-related SDG targets and indicators, as well as NUA visions and guidelines, is presented in Annex 3.



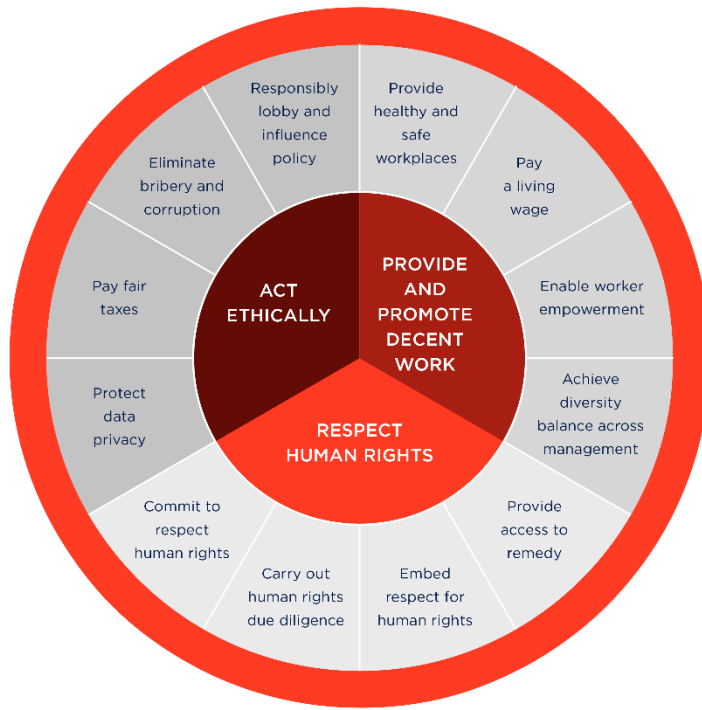


FIGURE 5. CORE SOCIAL INDICATORS



Industry and company selection

Keystone company selection

The selection of the companies in scope for the Urban Benchmark is based on WBA's methodology for identifying its [SDG2000 'keystone companies'](#) across the seven systems that need to be transformed to put our society, planet and economy on a more sustainable and resilient path. The methodology draws upon five principles that guided the identification of companies:

1. The company dominates global production revenues and/or volumes within a particular sector.
2. The company controls globally relevant segments of production and/or service provision.
3. The company connects (eco)systems globally through subsidiaries and their supply chains.
4. The company influences global governance processes and institutions.
5. The company has a global footprint, particularly in developing countries.

Currently, 415 companies will be in in scope for the Urban Benchmark, consisting of public, private and partly state-owned enterprises. These include some of the largest real estate, construction, design and engineering, transportation and logistics, and utility companies in the world, whose headquarters spread over various regions, including the world's megacities. Some of these companies are also identified and benchmarked in other WBA benchmarks, most prominently Climate and Energy and the Nature Benchmark.

Selecting companies by region

It is important to ensure geographic diversity in the headquarters' location of the Urban Benchmark companies. Even though more than half of the world's GDP is generated in Europe and North America, more than half of the population lives in South and East Asia. The regional composition of the companies in scope should therefore reflect a balance between population and GDP considerations, i.e., by the taking the average of the two, as presented below.

Region	[a] Share of world population	[b] Share of world GDP	Average of [a] population share and [b] GDP share	Number of companies
East Asia and the Pacific	30,2%	32,1%	31,2%	131
Europe and Central Asia	11,8%	26,1%	18,9%	81
Latin America and the Caribbean	8,4%	5,7%	7,1%	30
Middle East and North Africa	6,0%	3,8%	4,9%	24
North America	4,7%	26,0%	15,4%	63
South Asia	24,0%	4,3%	14,1%	56
Sub-Saharan Africa	14,9%	2,0%	8,4%	30

TABLE 2. DISTRIBUTION PER POPULATION AND GDP SHARE



Aside from looking at the current GDP and population, we also look at trends of urbanisation. Some regions are experiencing urbanisation faster than others. Currently urbanisation is happening the fastest in East Asia and the Pacific, South Asia, and Sub-Saharan Africa (see **Error! Reference source not found.**). Much of this urbanisation is taking place in megacities, or urban regions that accommodate 10 million people or more. The UN Population Division estimates the presence of 34 megacities in 2022 and 48 megacities by 2035. Out of the 48, 18 will be located in East Asia and the Pacific, and 11 in South Asia (see **Error! Reference source not found.**). The composition of the Urban Benchmark companies considers the distribution of companies which are headquartered in these megacities.

Industry distribution

The proportion of companies to be benchmarked has been determined according to the relative share of such industries' gross domestic product (GDP) to the total GDP. Referring to the breakdown of the United States' GDP by industry in 2021, the proportion of UTB companies will fall approximately along the following lines:

Industry	% of companies in scope	# of companies in scope
Real estate developers, investors and management services	32%	134
Engineering and construction	24%	99
Transportation and logistics	18%	75
Utilities and waste management services	26%	107

TABLE 3. DISTRIBUTION PER INDUSTRY

Following the above criteria for selecting companies based on the keystone principle, industry and region, the full list of the companies in scope is shown in Annex 6.



Indicators for the Urban Benchmark

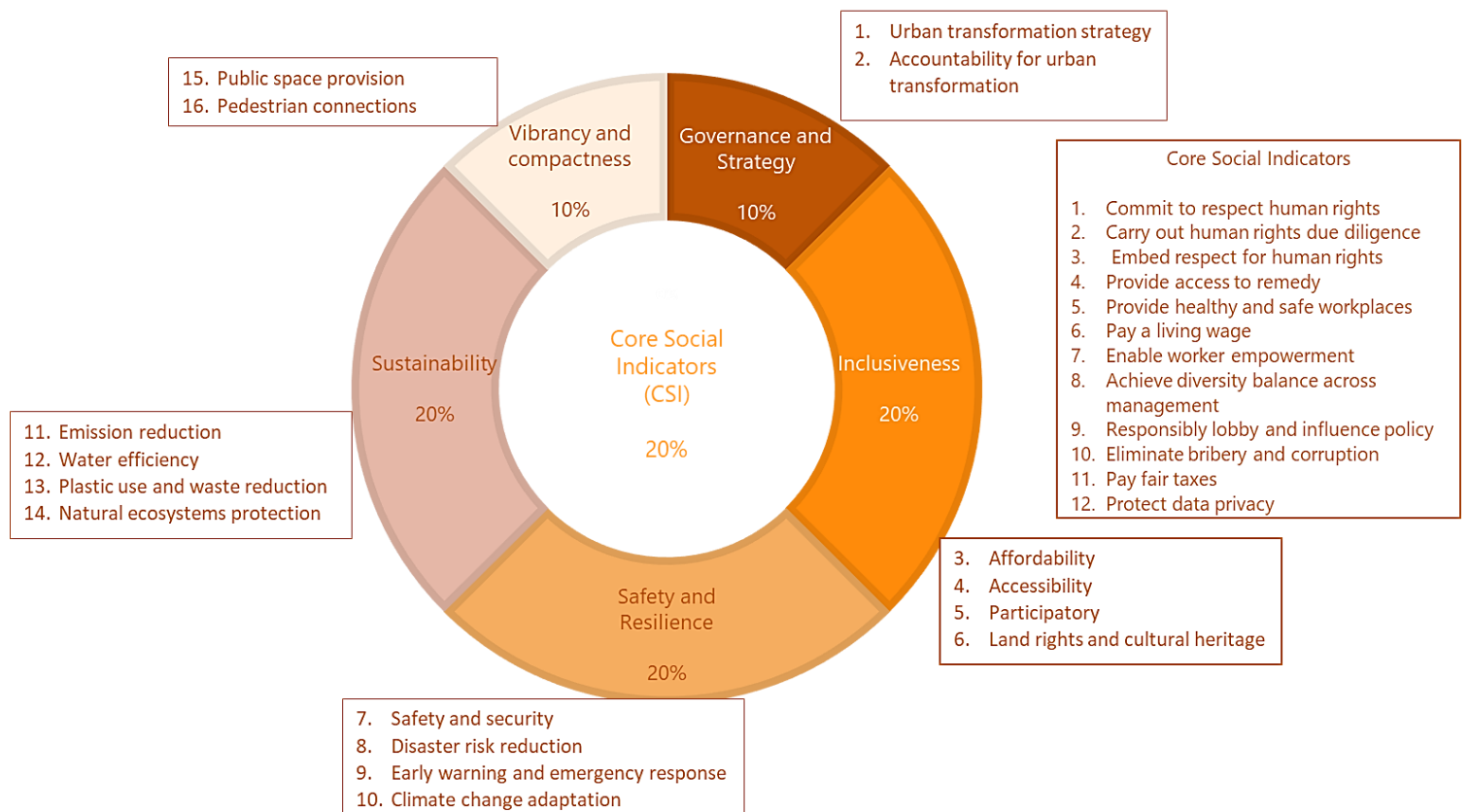


FIGURE 6. URBAN BENCHMARK INDICATOR OVERVIEW

Governance and Strategy

The first measurement area is about the integration of the 2030 Agenda for sustainable development and the NUA into companies' core strategy, business model and governance structure. The objective of the measurement area is to capture companies' overall commitment to sustainable urbanisation, which includes social inclusiveness, safety, resilience, as well as environmental and spatial sustainability. This includes assessing the extent to which the company's highest governing board are held accountable for its progress on targets, and how outcomes are incorporated in its business strategy review.



1. Urban transformation strategy

Indicator: The company has sustainability and urban transformation objectives and targets embedded in its strategy and business model.

Rationale: To ensure the fulfilment of the SDGs and the NUA, companies need to prioritise and embed aligned sustainability goals and targets into its own long-term strategy. Companies should prioritise the issues on which the company has clear impacts, set realistic but ambitious objectives and targets, and review these periodically to ensure they remain fit for the changing contexts, and report on performance. This guarantees the company's ability to adapt and change through forward planning, increasing its resilience, managing risks and protecting workers, the company and society at large, at the same time it ensures we deliver on the 2030 Agenda.

Scoring elements:

- a. The company has policy statement committing it to contribute positively to urban transformation as stated in the SDGs and NUA, which is approved by the highest governance body.
- b. The company identifies priority issues on which it has clear impacts to urban transformation as stated in the SDGs and NUA.
- c. The company sets objectives and targets that cover priority issues stated in 1.b.
- d. The company reports its performance against the objectives and targets stated in 1.b.

Sources: CDSB (2019), Forum for the Future and WBSCD (2021), GRI 2-22, 2-23, 3-1, 3-2, 3-3 (2021), IFAC et al. (2020), IPBES (2019), SBTN (2020), UNDP (2021), WEF (2020).



2. Accountability for urban transformation strategy

Indicator: The company has a governance system that includes highest level responsibility and links remuneration policies and accountability for its urban transformation objectives and targets

Rationale : Linking sustainable development objectives and targets to roles and remuneration is important to ensure the accountability of the company in relation to its contribution to the 2030 Agenda and the NUA. Ensuring capability within decision-making bodies, as well as linking remuneration policies for senior executives, further indicates a company's commitment to transitioning to a sustainable future.

Scoring elements:

- a) The company discloses having persons, teams or committees within the company who are responsible for the implementation of its sustainability and urban transformation strategy.
- b) The company provides evidence of assigning decision-making and oversight responsibility for its sustainability and urban transformation strategy, to the highest governance body.
- c) The company provides evidence of linking performance criteria in senior executives' remuneration policies to targets and objectives which cover all aspects relevant to the urban transformation, as defined in the benchmark.
- d) The company provides evidence that its highest governance body has expertise with respect to the company's most material topics regarding the urban transformation.

Sources: CDSB (2019), GRI 2-10, 2-12, 2-13, 2-14, 2-17 (2021), IFAC et al. (2020), UNDP (2021), WEF (2020).



Inclusiveness

Cities, including the infrastructure, buildings, facilities, and services therein, have oftentimes become synonymous with exclusive and private. However, and in synchronicity with the NUA (2016, p. 17), urban settlements should be inclusive and guarantee its full enjoyment by all inhabitants. For this purpose, this measurement area has translated this need into the following indicators: affordability, accessibility, participatory and respect for land rights and cultural heritage.

3. Affordability

Indicator: The company contributes to the inclusiveness and full enjoyment of a city by offering affordable access to housing and basic services, transport systems, drinking water

Rationale: Out of 92 metropolitan areas that are the world's major housing markets, 79 are either severely or seriously unaffordable (Urban Reform Institute and Frontier Centre for Public Policy, 2022). Unable to cope with the high cost of housing, many people end up in informal settlements, often overcrowded, without adequate water and sanitation, healthcare, educational or recreational facilities. Affordable housing and basic services, transport systems, drinking water and energy, are all part of the 2030 Agenda.

Affordability is defined differently for each of these elements. For example, a dwelling in the U.S. is considered affordable if its rent or mortgage payment amounts to 30 percent or less of what a low-income household earns, which is 80 percent of the city's median household income (HUD USER, 2017). For the purpose of the benchmark, affordability can be improved by companies offering a tiered pricing system as well as committing a portion of its products and services for low-income households. Such initiatives could be done fully through a company's private efforts and are complimentary to those set up by governments.

Scoring elements:

- a. The company discloses qualitative evidence of its tiered pricing and/or its products and services targeting lower-income households.
- b. The company commits to offer a tiered pricing system to improve affordability to lower-income households.
- c. The company commits a portion of its products and services for lower-income households on reduced or subsidized rates.
- d. The company reports the percentage of its products and services that are affordable, and the percentage of consumers who received affordable prices/ rates.

Sources : HUD USER (2017), UN GA (2010), SDGs 11, 11.1, 11.1, 6.1, 7.1 (2015)



4. Accessibility

Indicator: The company commits to reduce all forms of discrimination, to improve the universal accessibility of all users and costumers and guarantee local community access to vital resources, within urban settlements.

Rationale: Cities in the world are difficult to navigate for minorities. Children and the older population, as well as those with disabilities, also have a hard time moving about the city . Gender can play a role in terms of security and harassment concerns in public places, as many buildings, transportation modes, and related services are typically designed with the adult male population in mind. Discriminatory policies and practices can still be found in many cities, whether explicit or implicit, towards certain gender, ethnic, people with disabilities and religious minorities, as well as domestic and foreign migrants. Furthermore, physical accessibility for all includes guaranteeing access to vital resources, such as water or passageways. Accessibility is included as part of the SDGs, as well as in the NUA.

Scoring elements:

- a. The company discloses qualitative evidence of its efforts to reduce all forms of discrimination that could limit accessibility, improving physical accessibility to all minorities – including, but not limited to children, older population and people with disabilities and guarantees access to vital resources.
- b. The company commits to ending all forms of discrimination – including but not limited to, gender, race, ethnicity, religion and people with disabilities, towards current and potential users.
- c. The company commits to universal physical access to its products and services that fit the need of all the inhabitants, including children, senior citizens and people with disabilities.
- d. The company commits to guaranteeing local community access to vital resources (i.e., water, passage ways) that are located in the company's area of operations.

Sources: SDGs 11.2, 11.7, 2.3, 6.1, 6.2, 7.1 (2015), UN Habitat NUA 13.b (2017), UN - OHCHR (2014). OSU (2022)



5. Participatory

Indicator: The company commits to contributing to participatory and people-centred urban settlements through formal and direct participation mechanisms, guaranteeing the needs of all its inhabitants are met.

Rationale: The planning, development, management and delivery of urban infrastructure and services has to take into account the aspirations and concerns of residents, customers and users of the companies' products and services, with particular attention to its minorities. Participatory approaches which seek for collaborative planning, including formal and direct participation mechanisms, which ensure gender and age-responsiveness, and include local communities when it comes to managing vital resources and basic services have been identified as part of the SDGs, as well as the NUA.

Scoring elements:

- a) The company discloses an overview of the issues raised during its stakeholder engagement activities.
- b) The company discloses its process for identifying relevant stakeholders across its value chain.
- c) The company discloses its process for engaging with stakeholder groups, including frequency and channels, beyond its materiality assessment or similar equivalent.
- d) The company discloses the outcomes of its stakeholder engagement activities and their integration into its strategy.
- e) The company's stakeholder engagement covers urban-specific topics covered by the Urban Benchmark.

Sources: GRI 2-29 (2021), IFAC et al. (2020), SASB (2018), SDGs 11.3, 5.5, 6.b (2015), UN GA (1986), UNDP (2021), UN Habitat NUA 13.b (2017), WEF (2020)



6. Land Rights and Cultural Heritage

Indicator: The company commits to promoting security of tenure for all, while acknowledging all different types of tenure types, which are gender, age, environmentally and culturally-responsive, paying particular attention to vulnerable tenure rights holders.

Rationale: Urban development does not usually occur in isolation or previously empty land and has to engage respectfully with existing dwellers and tenure rights holders. Land management and acquisition has to be done with particular attention to security of land tenure. This is particularly with true regarding vulnerable tenure holders like women and indigenous communities and needs to observe internationally recognised standards like free, prior and informed consent, grievance mechanisms and remediation. Furthermore, it must also respect cultural heritage, both tangible and intangible, including monuments, groups of buildings, and sites that have significant archaeological, historical, ethnological, or anthropological meaning.

Scoring elements:

- a. The company has a policy statement committing it to recognising and respecting legitimate tenure rights related to the ownership and use of land.
- b. The company identifies legitimate rights holders when acquiring, leasing or making other arrangements to use land, and follows internationally recognised standards like free, prior and informed consent.
- c. The company provides a grievance mechanism that is accessible to external individuals and communities.
- d. The company describes its process for providing prompt and adequate remediation that includes access to justice when legitimate rights holders are negatively affected.
- e. The company has a policy-level commitment to protect tangible and intangible cultural heritage.
- f. The company discloses qualitative evidence of its effort to protect tangible and intangible cultural heritage, as well as where it conducts activities that could have an impact on cultural heritage.

Sources: FAO (2012), FPP (2021), IFC (2012b), SDGs 11.4, 1.4, 5.a (2015), UN Habitat NUA 8, 14.b (2017), UN - OHCHR (2014b), UN - OHCHR (2015) WBA (2021),



Safety and Resilience

The third measurement area is safety and resilience. Urban transformation depends on infrastructure, buildings, and services offering safety and security for all urban dwellers particularly those in a vulnerable situation. This includes urban human settlements to be prepared for disasters by implementing holistic disaster risk management, equipped with early warning and emergency response systems. Furthermore, cities have to focus on climate change adaptability, as explained in the following indicators.

7. Safety and Security

Indicator: The company commits to the security and safety of all its users, including but not limited to the instauration of safety and security policies, and works towards eliminating all types of harassment and violence in the urban built environment.

Rationale: Cities have to be safe and secure. Urban dwellers conduct their daily activities in the built environment, which include both infrastructure, like buildings, sidewalks, roads and parks as well as its associated services and connections. According to the NUA, companies in the urban ecosystem should focus on creating urban settlements which are safe and secure so its inhabitants can use to their full enjoyment. These should be also be accommodating and appropriate to all inhabitants, reduce and eliminate harassment and violence, in particular towards vulnerable groups, and foster the regeneration of the social tissue.

Scoring elements

- a. The company publishes their safety and security policies for all current and potential customers and users to see
- b. The company follows international and [industry specific] safety and security standards for users and customers of its facilities and services.
- c. The company keeps a record of safety and security incidents in its operations and reports them to the authorities.

Sources: DCAF (2019), OSHA (n.d), SBD (n.d), SDGs 11.1, 11.2, 11.7, 6.1, 8.8, 10.7 (2015), UN Habitat NUA 813.b, 13.c (2017)



8. Disaster Risk Reduction

Indicator: The company commits to reducing risks related to natural disasters in its built environment and associated service networks by applying international and industry-specific standards.

Rationale: Urban areas are often prone to natural disasters. Many cities are located in earthquake zones and areas prone to typhoons and other dangers. The safety of the built environment starts from having disaster-resistant infrastructure, facilities, and services. The need for structural resilience is highlighted both in the 2030 Agenda for Sustainable Development as well as the NUA, which highlight the need to adopt and implement policies focused on resilience to disasters, as well as limiting vulnerability to disasters, including environment-related catastrophes. Buildings and service networks should be designed and built for disaster-proofing, according to the risk assessment results of the site and local regulations. Experience from Turkey shows that an investment of US\$1 in disaster-proof construction would save US\$40 in a post-earthquake reconstruction. (UN Habitat, 2007)

Scoring elements:

- a. The company follows international and [industry specific] standards for disaster-proofing its facilities and services at the construction or installation phase.
- b. The company regularly inspects their infrastructure and facilities for structural resiliency.

Sources: SDGs 11.5, 11.b, 11.c, 1.5 (2015), UN Habitat NUA 13.g, 65 (2017), UNISDR (2013), UNISDR (2015), UNISDR (2015b)



9. Early Warning and Emergency Response Systems

Indicator: The company has an early warning and emergency response system in place, which is regularly maintained and tested. It contributes to the overall improvement of early warning and emergency response systems.

Rationale: User, operators, and managers of the built environment must be prepared for the possibility of emergencies and must be able to provide the appropriate response to guarantee the safety and survival of all its inhabitants. A well-managed early warning and emergency response systems is critical, as addressed by the 2030 Agenda for Sustainable Development as well as the NUA. For the private sector, this translates into having early warning systems installed, implementing emergency response systems that are regularly tested and communicated to all users. The company also ensures that their buildings and facilities have adequate evacuation plans and are equipped with emergency supplies, are in contact with first responders and offer safety and access to healthcare services. They also have backup or reserve capacity to ensure that services, especially water, sanitation, and energy would not be affected for extended periods after an emergency.

Scoring elements:

- A. The company has early warning systems installed to warn users and customers of its facilities and services of possible disasters
- b. The company has emergency response mechanisms that are regularly drilled and communicated to users and customers.
- c. The company has backup system or reserve service capacity to ensure that users and customers are not deprived of basic needs in case an emergency happens.

Sources: ISO (2019), NIOSH (2018), SDGs 3.d, 13.3, 13.g (2015), UN Habitat NUA 13.g (2017)



10. Climate Change Adaptation

Indicator: The company commits to identifying potential climate change-related risks and conducting retrofitting activities accordingly.

Rationale: Aside from facing immediate disaster challenges, cities also face longer-term challenges from climate change in the form of increased frequency and intensity of extreme weather events. Many cities are located in coastal regions, river deltas and flood plains. Their infrastructure and services are prone to sea level rise, coastal and inland flooding, extreme heat, drought, wildfires, and other hazards related to climate change (McKinsey and C40, 2021). Cities should therefore be planned, developed, and managed to be adaptable to these rising challenges. Adaptation is a proactive and systematic, rather than reactive, way urban infrastructure and services are planned and managed.

Scoring elements:

- a. The company commits to conducting climate forecasting to identify risk probabilities in its operations and value chain and region of operation.
- b. The company commits to retrofits its infrastructure, buildings, facilities and equipment's to respond to potential climate hazards.
- c. The company commits to implementing nature-based solutions to respond to potential climate hazards as stated in 10.b.

Sources: C40 (2020), The World Bank (2012), SDGs 11.5, 11.b, 11.c (2015), UN Habitat NUA 13.g (2017), UNEP (2012), WEF (2022)



Sustainability

The fourth measurement area is sustainability. In this measurement area, we will look at the company's impact when it comes to environmental sustainability. According to the Resource Panel, urban material consumption accounts for as much as 40 billion tonnes of resources in 2010, which in keeping with business as usual, will amount to 90 billion tonnes in 2050 (IRP, 2018). Furthermore, cities are particularly fraught to issues related to waste management, air quality, water stress as well as the effects of climate change, and produce about 70% of worldwide emissions. (Dasgupta, Lall and Wheeler, 2022)

11. Emissions Reduction

Indicator: The company reduces its scope 1 and 2 greenhouse gas (GHG) emissions in line with a 1.5-degree trajectory.

Rationale: In 2010, cities and urban areas occupy only 0.45 to 3 per cent of the world's total land area, excluding Antarctica and Greenland (Liu and He, 2014). However, they account for over 70 per cent of the world's CO₂ emissions (Dasgupta, Lall and Wheeler, 2022). Much of such emissions come from motor vehicles, industrial activities, and building cooling and heating that rely on fossil fuels. It is thus imperative for urban infrastructure, buildings, transportation systems, and services to utilize energy more efficiently.

Scoring elements:

- a. The company discloses quantitative reductions in its scope 1 and 2 emissions.
- b. The company has time-bound targets to reduce its scope 1 and 2 emissions.
- c. The company reports progress against these targets.
- d. The company's scope 1 and 2 emissions targets are aligned with the 1.5-degree trajectory.

Sources: CDP C4 (2021), GRI 305 (2021) SBTi (n.d.), SBTN (2021), SDGs 11.2, 11.3, 11.b, 11.c, 7.1 (2015), UN Habitat NUA 13.f, 14.c, 44 (2017)



12. Water Efficiency

Indicator: The company reduces water withdrawal across the most material parts of its value chain.

Rationale: One-fifth of the world's river basins are experiencing significant changes in surface water available in the last five years (UN Water, 2021). Increasing exploitation of water resources is likely to lead to disruptions in ecosystem services in terms of renewing and purifying water resources. This indicator is aligned with the SBTN interim target to reduce water withdrawal in the most material parts of the value chain in line with environmental flow needs by 2030.

Scoring elements:

- a. The company provides quantitative evidence of reductions in water withdrawal in its own operations.
- b. The company has a time-bound target to reduce water withdrawal in its own operations and reports progress against the target.
- c. The company provides evidence of dependency on water-stressed areas in its own operations.
- d. The company discloses the proportion of withdrawals from water-stressed areas in its own operations.
- e. The company provides evidence of engaging with key stakeholders to reduce water withdrawal.
- f. The company provides evidence of dependency on water-stressed areas in its value chain. In addition, it has a target to engage with key stakeholders on the management of water-stressed areas and reports progress against the target.

Sources: CDP W8 (2021e), GRI 303 (2021), SBTN (2021), SDGs 11.3, 11.b, 11.c, 6.1 (2015), Transparent (n.d.), UNGC (2021), UN Habitat NUA 13.h (2017)



13. Plastic Use and Waste Reduction

Indicator: The company reduces plastic use and waste across the most material parts of its value chain.

Rationale: The world generated 2.24 billion tonnes of solid waste in 2020, or equivalent to 0.79 kilograms per person per day, according to World Bank estimates (The World Bank, 2022). As human activities converge in urban areas, much of that waste is handled by municipal waste management systems, which are often poorly managed in low-income countries. But since waste is a by-product of consumption, high income countries generate more waste per capita than low-income ones (The Guardian, 2016).

Scoring elements:

- a. The company provides qualitative evidence of reducing plastic use and waste in its own operations.
- b. The company provides quantitative evidence of reducing plastic use and waste in its own operations.
- c. The company has targets regarding reduction of virgin polymer production or overall plastic use and waste, or an increase in the proportion of reusable or refillable packaging, and reports against the targets.
- d. The company reports on the proportion of reused or recycled products, or proportion of virgin polymer use, or proportion of single-use plastics.
- e. The company reports on the amount of plastic waste generated, and proportions directed from or to disposal.
- f. The company provides evidence of actions to reduce plastic use and waste in its upstream activities.
- g. The company provides evidence of actions to reduce plastic use and waste in its downstream activities.

Sources: As You Sow (2021), As You Sow (2021b), GRI 306 (2021), Minderoo Foundation (2021), Transparent (n.d.), UNCTAD (2019).



14. Natural Ecosystems Protection

Indicator: The company commits to and demonstrates it is minimising its footprint from its business activities across all relevant ecosystems

Rationale: Sustainable urban development requires the protection of the city's natural ecosystems that are of special value from a conservation point of view (UNESCO, 1972). These include open, pervious spaces, along with the biodiversity therein. Even though a city is a human-made built-up environment, it should ensure the continuous functioning of the natural ecosystem that existed in the area before the city was developed.

The private sector has played important roles in protecting the natural ecosystem. For example, they recover degraded natural areas through tree planting, and contribute to prevention of forest fires and conservation of key species in an ecosystem (Red Electrica, n.d.) . These companies disclose the size and locations of natural ecosystems that were converted in its operations, and reports reductions in the land-use conversion from natural ecosystem to the built environment.

Scoring elements:

- a. The company has a commitment to minimise ecosystem conversion in the most material parts of its value chain.
- b. The company discloses qualitative evidence towards minimising ecosystem conversion in areas important for biodiversity.
- c. The company discloses quantitative targets to minimise conversion in all relevant realms (land, fresh water and marine).
- d. The company discloses progress against its targets to minimise conversion in all relevant realms (land, fresh water and marine).

Sources: Accountability Framework Initiative (2021), CDP F6 (2021b), Forest 500 (n.d.), SBTN (2020), SDGs 11.4, 11.7, 11.a (2015), UN Habitat NUA 13.a, 13.b, 13.h, 69 (2017)



Vibrancy and Compactness

The fifth measurement area is about how land is used to ensure economic vibrancy and integration of buildings and spaces in urban areas. Diverse but interrelated human activities taking place in a compact and interconnected built environment trigger agglomeration economies. This is something uniquely urban and refer to the cost savings that naturally arise from having many and different activities in close proximity to and within easy reach of each other. This means accommodating mixed and multiple uses, supported by seamless pathways between one place and another.

15. Public Space Provision

Indicator: The company contributes to creating urban settlements with increase compactness, offering mixed use infrastructure, as well as preserving local communities' access to green and public spaces.

Rationale: Urban areas benefit from agglomeration economies by leveraging on economies of scale and scope. While economies of scale refer to the total value of activities that occur in a certain place, economies of scope refer to the variety of activities therein. It is critical that urban areas have a good mix of activities. Thus, rather than having areas assigned for single-use purposes (i.e., residential or commercial or institutional only), they should be assigned for multiple uses, where possible. The Covid-19 pandemic has taught us the benefits of living in mixed-use quarters so to reduce the need for traveling in our daily activities, and of having the flexibility to alter the use of a structure according to our changing needs (i.e., accommodating work activities in our living area). Public space is also an important component of a vibrant area, and thus companies should provide areas within its premises that are open for public use.

Mixed-use developments are commonly found in urban centres, but less so in suburban areas, where single-use developments often still dominate. This indicator measures real estate developers' efforts in building mixed-use developments, adding one or two more uses if the development was previously serving a single-use, offering flexible-use spaces, and enabling adaptive reuse of existing spaces, in line with the local regulations. It also measures companies' efforts to provide publicly accessible space across its buildings and facilities.

Scoring elements:

- a. The company discloses the number and proportion of its buildings and facilities that are mixed-use
- b. The company provides quantitative evidence on the increased proportion of mixed-use space across its buildings and facilities.
- c. The company discloses the size and proportion of its floor space or land area that are publicly accessible.
- d. The company provides quantitative evidence on the increased proportion of publicly accessible space across its buildings and facilities

Sources: C40 ([2021](#)), UN Habitat ([2018](#)), UCLG ([2016](#)), HK Development Bureau ([n.d.](#))



16. Pedestrian Connections

Indicator: The company contributes to an urban settlement that is transit-oriented, by providing infrastructure that is easy to navigate by foot, non-motorised and public and shared transportation.

Rationale: The principles of transit-oriented development and 'fifteen-minute cities' refer to places where daily activity are within easy reach by foot, non-motorised transport, and public transport. To further enable such principles, buildings and public transport stations need to have seamless pedestrian access between them. They need to be interconnected to each other as much as possible, to reduce detours and crossings that may lead to a waste of energy and time, and the possibility of accidents.

Leading real estate and public transport need to actively pursue seamless pathways and interconnections between their building or facility with the adjacent and surrounding buildings. These can be provided in the form of direct and protected pedestrian access between a shopping centre and a train station on the ground level, or through the skyway and skybridge systems. For logistics and delivery companies, it can be in the form of specific pickup, drop-off, and collection points at safe, convenient and designated places. This indicator also measures company efforts to site their buildings and facilities within walking distance to a public transportation stop.

Scoring elements:

- a. The company discloses the number and proportion of its buildings or facilities that are directly connected to an adjacent building or facility via a protected pedestrian pathway.
- b. The company provides quantitative evidence on the increased proportion of its buildings and facilities that are directly connected to an adjacent building or facility via a protected pedestrian pathway.
- c. The company discloses the number and proportion of its buildings or facilities that are within walking distance (400m) to a public transportation stop.
- b. The company provides quantitative evidence on the increased proportion of its buildings and facilities that are within walking distance (400m) to a public transportation stop.

Sources: C40 (2021), Minneapolis City Council (2019), City of Kirkland (2004), SDGs 11.2, 11.3, 11.a, 3.6, 10.7 (2015), UN Habitat NUA Vision 13.e, 13.f, Principles 14.a (2017)



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Annexes

Annex I. Full company list

The following four tables list the 415 companies in scope for the Urban Benchmark. They are split depending on which sectors they will be included in: Real estate, asset management, and conglomerates (134 companies), Construction and engineering (959 companies), Transportation and logistics (75 companies), and utilities and waste management (107 companies).

Real estate, asset management and conglomerates

Company name	Region	Headquarters
Aldar	Middle East & North Africa	United Arab Emirates
Arabian Centres	Middle East & North Africa	Saudi Arabia
Asset World Corp	East Asia & Pacific	Thailand
Atlas Group	South Asia	Pakistan
Avalonbay Communities	North America	USA
Ayala Corporation	East Asia & Pacific	Philippines
Azrieli Group	Middle East & North Africa	Israel
Bahria Town	South Asia	Pakistan
Becamex	East Asia & Pacific	Vietnam
Beijing Capital Group (BCG Group)	East Asia & Pacific	China
BR Properties	Latin America & Caribbean	Brazil
Brigade Enterprises Ltd	South Asia	India
Brookfield Asset Management	North America	Canada
Bumi Serpong Damai	East Asia & Pacific	Indonesia
Canadian Apartment REIT	North America	Canada
Capitaland Investment	East Asia & Pacific	Singapore
CBRE Group	North America	USA
Central Pattana	East Asia & Pacific	Thailand
Cheung Kong Holdings	East Asia & Pacific	Hong Kong, China
China Evergrande Group	East Asia & Pacific	China
China Fortune Land Development	East Asia & Pacific	China
China Merchants Property	East Asia & Pacific	China
China Merchants Shekou Industrial Zone Holdings	East Asia & Pacific	China
China Overseas Land & Investment	East Asia & Pacific	Hong Kong, China
China Poly Group	East Asia & Pacific	China
China Resources Land	East Asia & Pacific	China
China Vanke	East Asia & Pacific	China
CIFI Holdings	East Asia & Pacific	China
Ciputra Development	East Asia & Pacific	Indonesia
City Developments Limited	East Asia & Pacific	Singapore
CK Asset Holdings	East Asia & Pacific	Hong Kong, China



Colliers International Group	North America	Canada
Consultatio SA	Latin America & Caribbean	Argentina
Country Garden Holdings	East Asia & Pacific	China
Country Garden Services	East Asia & Pacific	China
Crown Castle	North America	USA
CSX Corp	North America	USA
Cushman & Wakefield	Europe & Central Asia	United Kingdom
Dalian Wanda Group	East Asia & Pacific	China
Deutsche Wohnen	Europe & Central Asia	Germany
Eagle Hills	Middle East & North Africa	United Arab Emirates
Emaar Properties	Middle East & North Africa	United Arab Emirates
Equinix	North America	USA
Equites Property Fund Ltd	Sub-Saharan Africa	South Africa
Equity Residential	North America	USA
Eurocommercial Properties NV	Europe & Central Asia	Netherlands
Even Construtora	Latin America & Caribbean	Brazil
Ezdan Holding Group QPSC	Middle East & North Africa	Qatar
Fibra Uno Administracion SA de CV	Latin America & Caribbean	Mexico
Fortress REIT	Sub-Saharan Africa	South Africa
Gazit Globe	Middle East & North Africa	Israel
Gecina	Europe & Central Asia	France
Gemdale	East Asia & Pacific	China
Godrej Properties	South Asia	India
Goodman Group	East Asia & Pacific	Australia
Greenland Holdings	East Asia & Pacific	China
Greentown China Holdings	East Asia & Pacific	China
Growthpoint Properties	Sub-Saharan Africa	South Africa
Grupo Carso	Latin America & Caribbean	Mexico
Grupo Roggio	Latin America & Caribbean	Argentina
Gruppa	Europe & Central Asia	Russian Federation
Hemisphere Properties	South Asia	India
Henderson Land	East Asia & Pacific	China
Hongkong Land	Latin America & Caribbean	Bermuda
Indiabulls Real Estate	South Asia	India
IRSA	Latin America & Caribbean	Argentina
Jabal Omar Development Company	Middle East & North Africa	Saudi Arabia
Janaadhar	South Asia	India
Jinke Property Group	East Asia & Pacific	China



Jones Lang LaSalle (JLL)	North America	USA
Ke Holdings	East Asia & Pacific	China
Keppel Corporation	East Asia & Pacific	Singapore
LEG Immobilien SE	Europe & Central Asia	Germany
LendLease Group	East Asia & Pacific	Australia
Link REIT	East Asia & Pacific	Hong Kong, China
Longfor Group Holdings	East Asia & Pacific	China
Macrotech Developers Ltd	South Asia	India
Mahindra Lifespace	South Asia	India
MAS Real Estate	Sub-Saharan Africa	South Africa
Megaworld	East Asia & Pacific	Philippines
Melisron Ltd	Middle East & North Africa	Israel
Mitsubishi Estate	East Asia & Pacific	Japan
Mitsui Fudosan	East Asia & Pacific	Japan
Mivne Real Estate	Middle East & North Africa	Israel
MRV Engenharia	Latin America & Caribbean	Brazil
Multiplan Empreendimentos Imobiliarios	Latin America & Caribbean	Brazil
NBCC	South Asia	India
New World Development	East Asia & Pacific	Hong Kong, China
Oberoi Realty	South Asia	India
Pakuwon Jati	East Asia & Pacific	Indonesia
Palm Hills Development	Middle East & North Africa	Egypt
Phoenix Mills	South Asia	India
Piramal Enterprises	South Asia	India
Plaza SA	Latin America & Caribbean	Chile
Prestige Estates	South Asia	India
Prologis	North America	USA
Public Storage	North America	USA
Puravankara	South Asia	India
Qatari Diar	Middle East & North Africa	Qatar
Realty Income	North America	USA
Redefine Properties Ltd	Sub-Saharan Africa	South Africa
Reliance Industries	South Asia	India
Resilient REIT	Sub-Saharan Africa	South Africa
RiseSun Real Estate Development	East Asia & Pacific	China
Robinsons Land	East Asia & Pacific	Philippines
Sagax AB	Europe & Central Asia	Sweden
Scentre Group	East Asia & Pacific	Australia
Seazen Holding	East Asia & Pacific	China
SEGRO PLC	Europe & Central Asia	United Kingdom
Shenzhen Overseas	East Asia & Pacific	China
Shimao	East Asia & Pacific	China



Simon Property Group	North America	USA
Sirius Real Estate	Sub-Saharan Africa	South Africa
SM Prime	East Asia & Pacific	Philippines
Sobha	South Asia	India
SODIC	Middle East & North Africa	Egypt
Sumitomo Realty & Development	East Asia & Pacific	Japan
Sun Hung Kai Properties	East Asia & Pacific	Hong Kong, China
Sunac	East Asia & Pacific	China
Sunteck Realty	South Asia	India
Swire Properties	East Asia & Pacific	Hong Kong, China
Swiss Prime Site	Europe & Central Asia	Switzerland
Talaat Moustafa Group	Middle East & North Africa	Egypt
Tokyu Fudosan Holdings	East Asia & Pacific	Japan
Unibail-Rodamco-Westfield SE	Europe & Central Asia	France
Union Homes REIT	Sub-Saharan Africa	Nigeria
United Development Company	Middle East & North Africa	Qatar
UPDC	Sub-Saharan Africa	Nigeria
Vinhomes	East Asia & Pacific	Vietnam
Vonovia SE	Europe & Central Asia	Germany
Vukile Property Fund	Sub-Saharan Africa	South Africa
Welltower	North America	USA
Wheelock and Co	East Asia & Pacific	Hong Kong, China
Yango Group	East Asia & Pacific	China



Construction and engineering

Company name	Region	Headquarters
ACCIONA	Europe & Central Asia	Spain
ACS Group	Europe & Central Asia	Spain
AECOM	North America	USA
Aedas	Europe & Central Asia	United Kingdom
Arbico	Sub-Saharan Africa	Nigeria
Arup	Europe & Central Asia	United Kingdom
Atlantia SpA	Europe & Central Asia	Italy
Aveng	Sub-Saharan Africa	South Africa
Balfour Beatty	Europe & Central Asia	United Kingdom
Bechtel	North America	USA
Beijing Construction Engineering Group (BCEG)	East Asia & Pacific	China
Beijing Urban Construction Group (BUCG)	East Asia & Pacific	China
Bouygues Group	Europe & Central Asia	France
Burns & McDonnell	North America	USA
China Communications Construction	East Asia & Pacific	China
China Energy Engineering Group	East Asia & Pacific	China
China Pacific Construction Group	East Asia & Pacific	China
China Railway Construction Corporation (CRCC)	East Asia & Pacific	China
China State Construction Engineering	East Asia & Pacific	China
CIDCO	South Asia	India
Costain West Africa	Sub-Saharan Africa	Nigeria
CREC	East Asia & Pacific	China
D.R. Horton	North America	USA
Daewoo Engineering & Construction	East Asia & Pacific	Republic of Korea
Daito Trust Construction	East Asia & Pacific	Japan
Daiwa House Group	East Asia & Pacific	Japan
DLF Limited	South Asia	India
Eiffage	Europe & Central Asia	France
Electra	Middle East & North Africa	Israel
EMCOR Group	North America	USA
Enka İnşaat ve Sanayi	Europe & Central Asia	Turkey
Estithmar Holding	Middle East & North Africa	Qatar
Ferrovial	Europe & Central Asia	Spain
Fluor	North America	USA
Fomento de Construcciones y Contratas	Europe & Central Asia	Spain
Gamuda	East Asia & Pacific	Malaysia
Gehl	Europe & Central Asia	Denmark
Gek Terna	Europe & Central Asia	Greece
Grupo Mexicano de Desarrollo	Latin America & Caribbean	Mexico
GS Engineering & Construction	East Asia & Pacific	Republic of Korea
Haseko Corporation	East Asia & Pacific	Japan



Hassan Allam Holdings	Middle East & North Africa	Egypt
Hassell	East Asia & Pacific	Australia
HDR Inc	North America	USA
Hindustan Construction Company	South Asia	India
Hochtief AG	Europe & Central Asia	Germany
HOK Group Inc	North America	USA
Housing and Urban Development Corporation	South Asia	India
Hyundai Engineering and Construction	East Asia & Pacific	Republic of Korea
IDEAL	Latin America & Caribbean	Mexico
Intercontinental Consultants and technocrats	South Asia	India
J Kumar	South Asia	India
Jacobs Solutions	North America	USA
Jiangsu Zhongnan Construction Group	East Asia & Pacific	China
Julius Berger	Sub-Saharan Africa	Nigeria
Kajima Corporation	East Asia & Pacific	Japan
KEC International	South Asia	India
Kumagai Gumi	East Asia & Pacific	Japan
Larsen & Toubro	South Asia	India
Lennar Corporation	North America	USA
Metallurgical Corporation of China	East Asia & Pacific	China
National Express Group	South Asia	Pakistan
NESPAK	South Asia	India
NVR	North America	USA
Obayashi Corporation	East Asia & Pacific	Japan
OEC	Latin America & Caribbean	Brazil
Orascom	Middle East & North Africa	Saudi Arabia
OTP	Latin America & Caribbean	Brazil
PIK Group	Europe & Central Asia	Russian Federation
PNC Infratech	South Asia	India
Power Construction Corporation of China (POWERCHINA)	East Asia & Pacific	China
PSG Corp	East Asia & Pacific	Thailand
PulteGroup	North America	USA
Quanta Services	North America	USA
Royal BAM Group	Europe & Central Asia	Netherlands
Sacyr	Europe & Central Asia	Spain
Samsung C&T Corp	East Asia & Pacific	Republic of Korea
Sasaki Associates	North America	USA
Sekisui House	East Asia & Pacific	Japan
Shanghai Construction Group	East Asia & Pacific	China
Shanghai Urban Construction Group Corporation	East Asia & Pacific	China
Shapoorji Pallonji & Co	South Asia	India
Shimizu Corporation	East Asia & Pacific	Japan



SK Ecoplant	East Asia & Pacific	Republic of Korea
Skanska	Europe & Central Asia	Sweden
SNC-Lavalin	North America	Canada
Stantec	North America	Canada
STRABAG	Europe & Central Asia	Austria
SWA Group	North America	USA
Sweco	Europe & Central Asia	Sweden
Swinerton	Europe & Central Asia	United Kingdom
Taisei Corporation	East Asia & Pacific	Japan
Tata Projects	South Asia	India
The Arab Contractors	Middle East & North Africa	Egypt
VINCI	Europe & Central Asia	France
Webuild	Europe & Central Asia	Italy
Whiting-Turner Contracting	North America	USA
Wilson Bayly Holmes	Sub-Saharan Africa	South Africa
WSP Global	North America	Canada



Transportation and logistics

Company name	Region	Headquarters
ABC Transport	Sub-Saharan Africa	Nigeria
Airbnb	North America	USA
Allcargo	South Asia	India
Bangalore Metropolitan Transport Corp	South Asia	India
Bangkok Expressway and Metro PCL	East Asia & Pacific	Thailand
Bangladesh Railway	South Asia	Bangladesh
Bangladesh Road Transport Corp	South Asia	Bangladesh
Beijing Shanghai High Speed Railway	East Asia & Pacific	China
Blue Dart	South Asia	India
Bolloré	Europe & Central Asia	France
Bolt	Europe & Central Asia	Estonia
Bykea	South Asia	Pakistan
Calcutta Tramways	South Asia	India
Canadian National Railway	North America	Canada
CCR	Latin America & Caribbean	Brazil
Central Japan Railway	East Asia & Pacific	Japan
China Post Group	East Asia & Pacific	China
China State Railway Group Company	East Asia & Pacific	China
ComfortDelGro	East Asia & Pacific	Singapore
Companhia do Metropolitano de Sao Paulo Metro	Latin America & Caribbean	Brazil
Delhi Metro Rail Corporation	South Asia	India
Delivery Hero	Europe & Central Asia	Germany
Deutsche Bahn	Europe & Central Asia	Germany
Deutsche Post DHL Group	Europe & Central Asia	Germany
DiDi	East Asia & Pacific	China
DSV	Europe & Central Asia	Denmark
East Japan Railway	East Asia & Pacific	Japan
FedEx	North America	USA
FirstGroup	Europe & Central Asia	United Kingdom
Forestiere Equatoriale	Sub-Saharan Africa	Ivory Coast
FS Italiane	Europe & Central Asia	Italy
GMexico Transportes	Latin America & Caribbean	Mexico
Go-Ahead Group	Europe & Central Asia	United Kingdom
GoTo	East Asia & Pacific	Indonesia
Grab	East Asia & Pacific	Singapore
Hankyu Hanshin Holdings	East Asia & Pacific	Japan
Imperial Logistics	Sub-Saharan Africa	South Africa
Istanbul Metro	Europe & Central Asia	Turkey
J&T Express	East Asia & Pacific	Indonesia
Jasa Marga	East Asia & Pacific	Indonesia
Kuehne + Nagel International	Europe & Central Asia	Switzerland
Lahore Transport Company	South Asia	Pakistan



Little	Sub-Saharan Africa	Kenya
Lyft	North America	USA
Maxi Mobility	Europe & Central Asia	Spain
Meituan	East Asia & Pacific	China
Metropolitan Transport Corporation (Chennai)	South Asia	India
MTR	East Asia & Pacific	Hong Kong, China
National Grid	Europe & Central Asia	United Kingdom
National Standard (India)	North America	USA
NS Groep	Europe & Central Asia	Netherlands
Obb-Personenverkehr	Europe & Central Asia	Austria
Ola	South Asia	India
Promotora y Operadora de Infraestructura	Latin America & Caribbean	Mexico
Red Star	Sub-Saharan Africa	Nigeria
Renfe Operadora	Europe & Central Asia	Spain
RITES	South Asia	India
Rossiyskiye Zheleznye Dorogi (JSC Russian Railways)	Europe & Central Asia	Russian Federation
Royal Mail Group	Europe & Central Asia	United Kingdom
S.F. Holding	East Asia & Pacific	China
SICOR	Sub-Saharan Africa	Ivory Coast
Sistema de Transporte Colectivo	Latin America & Caribbean	Mexico
SNCF Group	Europe & Central Asia	France
TCI Express	South Asia	India
Tokyu Corporation	East Asia & Pacific	Japan
Transdev	Europe & Central Asia	France
Transmilenio	Latin America & Caribbean	Colombia
Trans-Nationwide Express	Sub-Saharan Africa	Nigeria
Transport Corporation of India	South Asia	India
Transporte Coletivo Urbano de Luanda (TCUL)	Sub-Saharan Africa	Angola
Uber	North America	USA
United Parcel Service (UPS)	North America	USA
US Postal Service	North America	USA
Yunji	East Asia & Pacific	China
ZTO Express	East Asia & Pacific	China



Utilities and waste management

Company name	Region	Headquarters
Acea	Europe & Central Asia	Italy
Adani Transmission Limited	South Asia	India
AES Corporation	North America	USA
AGL Energy	East Asia & Pacific	Australia
American Electric Power (AEP)	North America	USA
American Water Works	North America	USA
Beijing Origin Water	East Asia & Pacific	China
BRK Ambiental	Latin America & Caribbean	Brazil
Centrica	Europe & Central Asia	United Kingdom
CEZ Group	Europe & Central Asia	Czech Republic
China Huadian Corporation	East Asia & Pacific	China
China Southern Power Grid	East Asia & Pacific	China
China Tianying	East Asia & Pacific	China
China Water Affairs Group	East Asia & Pacific	China
Chongqing Water Group	East Asia & Pacific	China
Chubu Electric Power	East Asia & Pacific	Japan
Clean Harbors	North America	Canada
Cleanaway Waste Management	East Asia & Pacific	Australia
CLP Holdings	East Asia & Pacific	Hong Kong, China
CMS Energy	North America	USA
Comgas	Latin America & Caribbean	Brazil
Comision Federal de Electricidad (CFE)	Latin America & Caribbean	Mexico
CONGO Société Nationale d'Électricité	Sub-Saharan Africa	Congo
Dominion Energy	North America	USA
Duke Energy	North America	USA
E.ON	Europe & Central Asia	Germany
Ecube Labs	East Asia & Pacific	Republic of Korea
EDP Energias de Portugal	Europe & Central Asia	Portugal
Egyptian Electricity Holding Company (EEHC)	Middle East & North Africa	Egypt
Électricité de France (EDF)	Europe & Central Asia	France
Electricity Generating Authority of Thailand	East Asia & Pacific	Thailand
Eletrobras	Latin America & Caribbean	Brazil
Elsewedy Electric	Middle East & North Africa	Egypt
Empresa Publica De Aguas de Luanda (EPAL)	Sub-Saharan Africa	Angola
EnBW Energie Baden-Wuerttemberg	Europe & Central Asia	Germany
Enel	Europe & Central Asia	Italy
ENGIE	Europe & Central Asia	France
Eskom Holdings	Sub-Saharan Africa	South Africa
Essential Utilities	North America	USA
Evoqua Water Technologies	North America	USA



Exelon Corporation	North America	USA
FirstEnergy Corp	North America	USA
Fortum	Europe & Central Asia	Finland
Girişim Elektrik	Europe & Central Asia	Turkey
Guangdong Investment	East Asia & Pacific	China
Gujarat Gas	South Asia	India
Hong Kong and China Gas (Hong Kong & China Water)	East Asia & Pacific	Hong Kong, China
Iberdrola	Europe & Central Asia	Spain
Inter RAO	Europe & Central Asia	Russian Federation
JSW Energy	South Asia	India
Kansai Electric Power Company (KEPCO)	East Asia & Pacific	Japan
K-Electric	South Asia	Pakistan
Kemble Water Holdings (Thames Water)	Europe & Central Asia	United Kingdom
Korea Electric Power Corporation (KEPCO/Hanjeon)	East Asia & Pacific	Republic of Korea
Kyushu Electric Power	East Asia & Pacific	Japan
Mahagenco	South Asia	India
Meralco	East Asia & Pacific	Philippines
Metro Pacific Investments	East Asia & Pacific	Philippines
National Railroad Passenger Corporation (Amtrak)	Europe & Central Asia	United Kingdom
Nextera Energy	North America	USA
NTPC	South Asia	India
Origin Energy	East Asia & Pacific	Australia
Ørsted	Europe & Central Asia	Denmark
Pacific Gas and Electric (PG&E)	North America	USA
Pampa Energia	Latin America & Caribbean	Argentina
Perusahaan Listrik Negara (PLN)	East Asia & Pacific	Indonesia
Power Grid Company Bangladesh	South Asia	Bangladesh
Power Grid Corporation of India	South Asia	India
Promigas	Latin America & Caribbean	Colombia
Promotora Ambiental	Latin America & Caribbean	Mexico
Qatar Electricity and Water	Middle East & North Africa	Qatar
Regideso	Sub-Saharan Africa	Congo
REMONDIS Group	Europe & Central Asia	Germany
Republic Services	North America	USA
Rosseti	Europe & Central Asia	Russian Federation
RWE	Europe & Central Asia	Germany
SABESP	Latin America & Caribbean	Brazil
Sanepar	Latin America & Caribbean	Brazil
Saudi Electricity Company (SEC)	Middle East & North Africa	Saudi Arabia
Sempra Energy	North America	USA
Severn Trent	Europe & Central Asia	United Kingdom



Shanghai Electric	East Asia & Pacific	China
Southern Co	North America	USA
SPML Infra	South Asia	India
SSE	Europe & Central Asia	United Kingdom
State Grid Corporation of China	East Asia & Pacific	China
Stericycle	North America	USA
SUEZ	Europe & Central Asia	France
Taiwan Power Company	East Asia & Pacific	Taiwan, China
Tanzania Electric Supply Company Limited (TANESCO)	Sub-Saharan Africa	Tanzania
Tata Power	South Asia	India
Tenaga Nasional	East Asia & Pacific	Malaysia
The Initiates	Sub-Saharan Africa	Nigeria
Tohoku Electric Power	East Asia & Pacific	Japan
Tokyo Electric Power Company (TEPCO)	East Asia & Pacific	Japan
Tomra Systems	Europe & Central Asia	Norway
Transcorp Power	Sub-Saharan Africa	Nigeria
United Utilities Group	Europe & Central Asia	United Kingdom
Urbaser	Europe & Central Asia	Spain
Va Tech Wabag	South Asia	India
Vattenfall	Europe & Central Asia	Sweden
Veolia Environnement	Europe & Central Asia	France
Vietnam Electricity	East Asia & Pacific	Vietnam
Waste Connections	North America	Canada
Waste Management Inc	North America	USA
Xcel Energy	North America	USA
Xylem	North America	USA

Annex II. Benchmarks, standards and frameworks relevant to the Urban Benchmark

N o.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
1	ISO 37120 Sustainable cities and communities — Indicators for city services and quality of life	<ol style="list-style-type: none"> 1. Economy 2. Education 3. Energy 4. Environment & Climate 5. Finance 6. Governance 7. Health 8. Housing 9. Population & Social 	Cities; Self-assessment ; Results not compared across cities and not published	ISO (International Organization for Standardization); 2018	These are not benchmarks but standards/indicators that are consistent and comparable to measure cities' performance over time and across cities. It



N o.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
2	ISO 37122 Sustainable cities and communities — Indicators for smart cities	10. Recreation 11. Safety 12. Solid Waste 13. Sport & Culture 14. Telecommunications 15. Transportation 16. Urban Agriculture & Food Security		ISO; 2019	provides a uniform approach to what is measured and how that measurement is to be undertaken. It does not provide a value judgement threshold or target numerical value for the indicators.
3	ISO 37123 Sustainable cities and communities — Indicators for resilient cities	17. Urban Planning 18. Wastewater 19. Water		ISO: 2019	
4	Key Performance Indicators for Smart Sustainable Cities	Economy 1. ICT 2. Productivity 3. Infrastructure Environment 4. Environment 5. Energy Society & Culture 6. Education Health & Culture 7. Safety Housing & Social Inclusion	Cities; Self-assessment ; Results not compared across cities and not published	ITU 2017 Developed within the United for Smart Sustainable Cities (U4SSC) initiative.	This is a methodology to provide cities with a consistent and standardised method to collect data and measure performance and progress to achieving the SDGs; becoming a smarter city; and a more sustainable city.
5	City Resilience Index (CRI)	Health & Well-being 1. Meets Basic Needs 2. Supports Livelihoods & Employment 3. Ensures Public Health Services Economy & Society 4. Promotes Cohesive and Engaged Communities 5. Ensures Social Stability Security and Justice	Cities; Self-assessment ; Results of self-assessment by 12 cities were published in 2018	The Rockefeller Foundation & Arup 2014 (framework) 2018 (assessment of 12 cities)	Introduces variables that provide a basis for measuring resilience at the city scale. 12 cities have completed the assessment in 2018. Cities interested in carrying out an assessment for the first time can



N o.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
		Infrastructure & Environment 6. Fosters Economic Prosperity 7. Enhances and Provides Protective Natural & Man-Made Assets 8. Ensures Continuity of Critical Services Leadership & Strategy 9. Provides Reliable Communication and Mobility 10. Promotes leadership & effective management 11. Empowers a Broad Range of Stakeholders 12. Fosters Long-Term and Integrated Planning			request assistance from the Rockefeller Foundation.
6	European Green Capital Award (Urban Environment Good Practice & Benchmarking Report)	1. Local Contribution to Global Climate Change 2. Local Transport 3. Green Urban Areas Incorporating Sustainable Land Use 4. Nature & Biodiversity 5. Quality of Local Ambient Air 6. Quality of Acoustic Environment 7. Waste Production & Management 8. Water Consumption 9. Wastewater Treatment 10. Eco-innovation and Sustainable Employment	Cities apply to the competition provide data related to the indicators and are assessed by a panel of experts and a jury.	European Commission; 2010; Annual; Ongoing.	An initiative to promote and reward the role that local authorities play in improving the environment.



N o.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
		11. Environmental Management 12. Energy Performance			
7	Sustainable Urban Mobility Benchmark for New Zealand	Mode 1. Walking 2. Cycling 3. Public Transport 4. Multimodal Transport Outcomes 1. Inclusive Access 2. Healthy & Safe People 3. Environmental Sustainability 4. Resilience & Security 5. Economic Prosperity	Cities are benchmarked based on secondary and primary data	Waka Kotahi - New Zealand Transport Agency; 2022 report completed comparing 5 cities (councils)	The benchmark is a collection of measures that are common across councils that lead to better health environment connectedness and safety.
8	A Framework for Urban Transport Benchmarking	1. Uptake of Public Transport 2. Travel Efficiency 3. Accessibility 4. Affordability 5. Traveling Experience	Cities	The World Bank; 2011; Report	The framework is a result of a research project on benchmarking of urban transport in transition and developing countries with focus on public transport.
9	Safe Cities Index	76 indicators across 5 domains: 1. Digital Security 2. Health Security 3. Infrastructure Security 4. Personal Security 5. Environmental Security	Cities (60 in 2021)	The Economist Intelligence Unit; 2015; Biannually	The Index is a global policy benchmarking tool measuring urban safety. Since 2015 each edition has been refined to reflect new concerns.
10	The Arcadis Sustainable Cities Index	1. People 2. Planet 3. Profit	Cities (100 in 2022)	Arcadis; 2015 2016 2018 2022	The index combines the three pillars of Planet People and Profit that need to be considered before a city can



N o.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
					unlock its prosperity potential.
11	Global Cities Index	29 metrics within 5 dimensions: <ol style="list-style-type: none"> 1. Business Activity 2. Human Capital 3. Information Exchange 4. Cultural Experience 5. Political Engagement 	Cities (156 in 2021)	Kearney; 2010; Annual	The Index quantifies global connectedness of a city and assess the competitiveness of 156 cities across five dimensions by considering the city's market dynamics education levels information access culture and entertainment options and presence of international civic organizations.
12	Intercultural Cities Index	<ol style="list-style-type: none"> 1. Commitment 2. Intercultural Lens 3. Mediation & Conflict Resolution 4. Language 5. Local Media Relations 6. Open and International Outlook 7. Intelligence/Competence 8. Welcoming New Arrivals 9. Governance 	19 Cities (2018); Fill a questionnaire	Council of Europe	The Intercultural Cities Programme supports cities and regions in reviewing and adapting their policies through an intercultural lens and developing comprehensive intercultural strategies to manage diversity as an advantage for the whole society.



No.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
13	GRESB Real Estate Assessments	Management 1. Leadership 2. Policies 3. Reporting 4. Risk Management 5. Stakeholder Engagement Performance 1. Reporting 2. Risk Assessment 3. Targets 4. Tenants & Community 5. Energy 6. Greenhouse Gas 7. Water 8. Waste 9. Data Monitoring & Review 10. Building Certifications Development 1. Reporting 2. ESG Requirements 3. Materials 4. Building Certifications 5. Energy 6. Water 7. Waste 8. Stakeholder Engagement	In 2021 more than 1500 property companies REITs funds and developers representing \$5.7 trillion in assets under management; Companies fill data sheets; Scoring done automatically	GRESB; Annual	Captures information regarding ESG performance and sustainability best practices for real estate funds and companies worldwide.
14	GRESB Infrastructure Asset Assessment	Management 1. Leadership 2. Policies 3. Reporting 4. Risk Management 5. Stakeholder Engagement Performance 1. Implementation 2. Output & Impact 3. Health & Safety 4. Energy 5. Greenhouse Gas Emissions	In 2021 149 funds and 558 assets fill data sheets; Scoring done automatically	GRESB; Annual	Assesses ESG performance at the asset level for infrastructure asset operators fund managers and investors that invest directly in infrastructure.



N o.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
		<ul style="list-style-type: none"> 6. Air Pollution 7. Water 8. Waste 9. Biodiversity & Habitat 10. Employees 11. Customers 12. Certifications & Awards 			
15	IHRB Framework for Dignity in the Built Environment	<ul style="list-style-type: none"> 1. Land 2. Planning & Finance 3. Design 4. Construction 5. Management & Use 6. Demolition & Redevelopment 	Projects and Policies (of governments and companies)	IHRB	Provides a vision for respect for human rights throughout the built environment lifecycle and guidelines for action. The Framework is based on international human rights standards and the SDGs: it aims to be globally applicable and locally adaptable.
16	LEED (Leadership in Energy and Environmental Design) for Cities and Communities	<ul style="list-style-type: none"> 1. Integrative Process 2. Natural Systems & Ecology 3. Transportation & Land Use 4. Water Efficiency 5. Energy & GHG Emissions 6. Materials & Resources 7. Quality of Life 8. Innovation 9. Regional Priority 	Cities and communities (projects) both existing and under planning and design	US Green Building Council	This is a standard/certification that helps local leaders create and operationalize responsible sustainable and specific plans for various factors that contribute to quality of life in cities and communities — revolutionizing the way they are



No.	Benchmark / Standard Framework Title	Components	Who are being assessed & how	Institution; Start Year; Frequency	Notes
					planned developed and operated.

Annex III. Urban Benchmark indicators and industries, by SDGs and NUA targets

SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
Target 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	<ul style="list-style-type: none"> Affordability 	<ul style="list-style-type: none"> Safety & Security 			<ul style="list-style-type: none"> Real Estate Utilities
Target 11.2 By 2030 provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety notably by expanding public transport, with special attention to the needs of those in vulnerable situations: women	<ul style="list-style-type: none"> Affordability Accessibility Participatory 	<ul style="list-style-type: none"> Safety & Security 	<ul style="list-style-type: none"> Emissions reduction 	<ul style="list-style-type: none"> Mixed use & public space provision Pedestrian connections 	<ul style="list-style-type: none"> Transportation



SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
children persons with disabilities and older persons					
Target 11.3 By 2030 enhance inclusive and sustainable urbanisation and capacity for participatory , integrated and sustainable human settlement <u>planning and</u> <u>management</u> in all countries	<ul style="list-style-type: none"> Participatory 		<ul style="list-style-type: none"> Emissions reduction 	<ul style="list-style-type: none"> Mixed use & public space provision Pedestrian connections 	<ul style="list-style-type: none"> Real Estate
Target 11.4 Strengthen efforts to protect and safeguard the world's <u>cultural and</u> <u>natural</u> <u>heritage</u>	<ul style="list-style-type: none"> Respect for land rights and cultural heritage 	<ul style="list-style-type: none"> Early warning & emergency response 	<ul style="list-style-type: none"> Natural ecosystems protection 		<ul style="list-style-type: none"> Real Estate Construction Transportation
Target 11.5 By 2030, significantly reduce the number of deaths and the number of people <i>affected</i> and substantially decrease the direct economic losses relative to global gross		<ul style="list-style-type: none"> Safety & Security Disaster risk reduction Climate change adaptation 			<ul style="list-style-type: none"> Real Estate Construction Transportation Utilities



SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
domestic product caused by <u>disasters</u> , including water-related disasters with a focus on protecting the poor and people in vulnerable situations					
Target 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to <u>air quality</u> and municipal and other <u>waste management</u>			<ul style="list-style-type: none"> Emissions reduction Plastic use & waste reduction 		<ul style="list-style-type: none"> Construction Transportation Utilities
Target 11.7 By 2030 provide universal access to safe inclusive and accessible green and public spaces in particular for women and children older persons and persons with disabilities	<ul style="list-style-type: none"> Accessibility 	<ul style="list-style-type: none"> Safety & Security 	<ul style="list-style-type: none"> Natural ecosystems protection 		<ul style="list-style-type: none"> Real Estate Transportation Utilities



SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
Target 11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development <u>planning</u>			<ul style="list-style-type: none"> Natural ecosystems protection 	<ul style="list-style-type: none"> Pedestrian connections Mixed use & public space provision 	<ul style="list-style-type: none"> Real Estate Transportation
Target 11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement in line with the Sendai Framework for Disaster Risk	<ul style="list-style-type: none"> Accessibility Participatory 	<ul style="list-style-type: none"> Disaster risk reduction Climate change adaptation Early warning & emergency response 	<ul style="list-style-type: none"> Emissions reduction Plastic use & waste reduction 	<ul style="list-style-type: none"> Mixed use & public space provision 	<ul style="list-style-type: none"> Real Estate Transportation Utilities



SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
Reduction 2015–2030, holistic disaster risk management at all levels					
Target 11.c Support least developed countries including through financial and technical assistance in building sustainable and resilient buildings utilizing local materials		<ul style="list-style-type: none"> Disaster risk reduction Climate change adaptation 	<ul style="list-style-type: none"> Natural ecosystems protection Emissions reduction Plastic use & waste reduction 		<ul style="list-style-type: none"> Real Estate Construction
Target 3.6 By 2020 halve the number of global deaths and injuries from <u>road traffic accidents</u>		<ul style="list-style-type: none"> Safety & Security 		<ul style="list-style-type: none"> Pedestrian connections 	<ul style="list-style-type: none"> Transportation
Target 5.a Undertake reforms to give women equal rights to economic resources as well as access to <u>ownership and control over land</u> and other forms of property financial services inheritance and natural resources in	<ul style="list-style-type: none"> Participatory Respect for land rights and cultural heritage 			<ul style="list-style-type: none"> Mixed use & public space provision 	<ul style="list-style-type: none"> Real Estate Construction



SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
accordance with national laws					
Target 6.1 By 2030 achieve universal and equitable access to safe and affordable drinking water for all	<ul style="list-style-type: none"> • Accessibility • Affordability 	<ul style="list-style-type: none"> • Safety & security 	<ul style="list-style-type: none"> • Water efficiency 		<ul style="list-style-type: none"> • Real Estate • Water Utilities
Target 6.2 By 2030 achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation paying special attention to the needs of women and girls and those in vulnerable situations	<ul style="list-style-type: none"> • Accessibility • Affordability • Participatory 	<ul style="list-style-type: none"> • Safety & security 	<ul style="list-style-type: none"> • Natural ecosystems protection • Plastic use & waste reduction 		<ul style="list-style-type: none"> • Real Estate • Waste management utilities
Target 7.1 By 2030 ensure universal access to affordable, reliable and modern energy services	<ul style="list-style-type: none"> • Accessibility • Affordability 	<ul style="list-style-type: none"> • Safety & security 	<ul style="list-style-type: none"> • Emissions reduction 		<ul style="list-style-type: none"> • Real Estate • Power utilities
Target 10.7 Facilitate orderly safe	<ul style="list-style-type: none"> • Accessibility 	<ul style="list-style-type: none"> • Safety & security 		<ul style="list-style-type: none"> • Pedestrian 	<ul style="list-style-type: none"> • Real Estate • Transportation



SDG Target	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
regular and responsible <u>migration and mobility of people</u> including through the implementation of planned and well-managed migration policies				connections	

NUA Vision	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
Paragraph 13.A Cities fulfil the right to adequate housing, drinking water and sanitation, food security and nutrition, health, education, infrastructure, mobility and transportation, energy, air quality and livelihoods;	<ul style="list-style-type: none"> Affordability Accessibility 	<ul style="list-style-type: none"> Safety & Security 	<ul style="list-style-type: none"> Plastic use & waste reduction 		<ul style="list-style-type: none"> Real Estate Transportation Utilities
Paragraph 13.B Cities are participatory , promote civic engagement and inclusion , prioritize safe, inclusive, accessible ,	<ul style="list-style-type: none"> Participatory Accessibility 	<ul style="list-style-type: none"> Safety & Security 	<ul style="list-style-type: none"> Natural ecosystems protection 	<ul style="list-style-type: none"> Mixed use & public space provision 	<ul style="list-style-type: none"> Real Estate



NUA Vision	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
<p>green and quality public spaces</p>					
<p>Paragraph 13.C Cities achieve gender equality and empower all women and girls, preventing and eliminating all forms of discrimination, violence and harassment in private and public spaces;</p>	<ul style="list-style-type: none"> • Accessibility • Participatory • Respect for land rights and cultural heritage 	<ul style="list-style-type: none"> • Safety & Security 			<ul style="list-style-type: none"> • Real Estate • Transportation
<p>Paragraph 13.D Cities meet the challenges and opportunities of present and future economic growth, leveraging urbanisation for high productivity, value-added activities, harnessing local economies and taking note of the contribution of the informal economy</p>			<ul style="list-style-type: none"> • Natural ecosystems protection 	<ul style="list-style-type: none"> • Mixed use & public space provision • 	<ul style="list-style-type: none"> • Real Estate



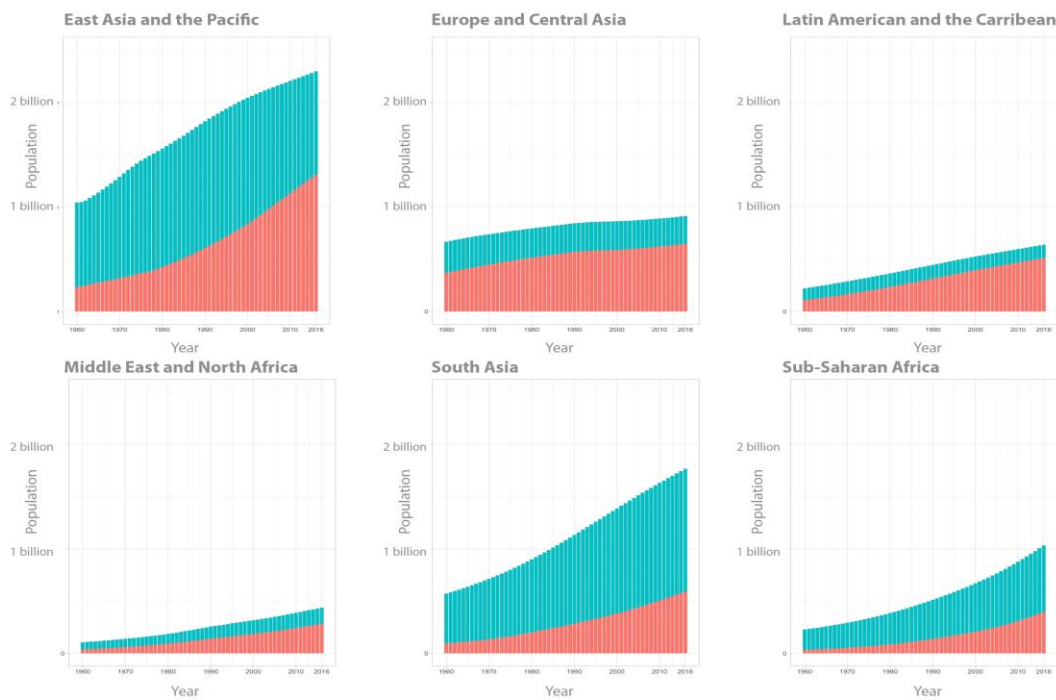
NUA Vision	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
Paragraph 13.E Cities act as hubs and drivers for balanced, sustainable and integrated urban and territorial development at all levels				<ul style="list-style-type: none"> Mixed use & public space provision Pedestrian connections 	<ul style="list-style-type: none"> Real Estate Transportation
Paragraph 13.F Cities promote planning and investment for sustainable, safe and accessible urban mobility and resource-efficient transport systems for passengers and freight	<ul style="list-style-type: none"> Participatory Accessibility 	<ul style="list-style-type: none"> Safety & Security 	<ul style="list-style-type: none"> Emissions reduction 	<ul style="list-style-type: none"> Pedestrian connections 	<ul style="list-style-type: none"> Real Estate Transportation
Paragraph 13.G Cities adopt and implement disaster risk reduction and management, reduce vulnerability, build resilience and foster mitigation and adaptation to climate change		<ul style="list-style-type: none"> Disaster risk reduction Climate Change Adaptation Early warning & emergency response 			<ul style="list-style-type: none"> Real Estate Construction Transportation Utilities
Paragraph 13.H Cities protect, their ecosystems, water, natural habitats and biodiversity, and change to			<ul style="list-style-type: none"> Resource efficiency Waste reduction Protects natural & cultural heritage 		<ul style="list-style-type: none"> Real Estate Construction Utilities



NUA Vision	Inclusive	Safe & Resilient	Sustainable	Compact & Integrated	Relevant Industries
sustainable consumption and production patterns.					

Annex IV. Urban and rural populations

The World has been urbanising at a rapid pace and urbanisation is expected to be the defining demographic trend of the next few decades. This is particularly evident in East Asia South Asia and Sub-Saharan Africa where many of the world's poor are concentrated. The pace in which their urban population is growing as opposed to their rural population can be seen in Figure 2. Figure 2 Number of urban and rural population by world region.



Annex V. The world's megacities in 2035¹

Rank	Urban Agglomeration	Country or area	Population 2022 ('000)	Population 2035 ('000)	Region
1	Delhi	India	32066	43345	South Asia
2	Tokyo	Japan	37274	36014	East Asia & Pacific
3	Shanghai	China	28517	34341	East Asia & Pacific
4	Dhaka	Bangladesh	22478	31234	South Asia
5	Al-Qahirah (Cairo)	Egypt Arab Rep.	21750	28504	Middle East & North Africa
6	Mumbai (Bombay)	India	20961	27343	South Asia
7	Kinshasa	Congo Dem. Rep.	15628	26682	Sub-Saharan Africa
8	Mexico City	Mexico	22085	25415	Latin America & Caribbean
9	Beijing	China	21333	25366	East Asia & Pacific
10	Sao Paulo	Brazil	22430	24490	Latin America & Caribbean
11	Lagos	Nigeria	15388	24419	Sub-Saharan Africa
12	Karachi	Pakistan	16840	23128	South Asia
13	New York-Newark	United States	18867	20817	North America
14	Chongqing	China	16875	20531	East Asia & Pacific
15	Kolkata (Calcutta)	India	15134	19564	South Asia
16	Lahore	Pakistan	13542	19117	South Asia
17	Manila	Philippines	14406	18649	East Asia & Pacific
18	Kinki M.M.A. (Osaka)	Japan	19060	18346	East Asia & Pacific
19	Bangalore	India	13193	18066	South Asia
20	Istanbul	Turkey	15636	17986	Europe & Central Asia
21	Buenos Aires	Argentina	15370	17128	Latin America & Caribbean
22	Guangzhou	China	13965	16741	East Asia & Pacific
23	Tianjin	China	14012	16446	East Asia & Pacific
24	Chennai (Madras)	India	11503	15376	South Asia
25	Shenzhen	China	12831	15185	East Asia & Pacific
26	Rio de Janeiro	Brazil	13634	14810	Latin America & Caribbean
27	Luanda	Angola	8952	14495	Sub-Saharan Africa
28	Hyderabad	India	10534	14152	South Asia
29	Los Angeles-Long Beach-Santa Ana	United States	12488	13778	North America
30	Jakarta	Indonesia	11075	13688	East Asia & Pacific

¹ United Nations, Department of Economic and Social Affairs, Population Division (2018). World Urbanization Prospects: The 2018 Revision, Online Edition. POP/DB/WUP/Rev.2018/1/F22.

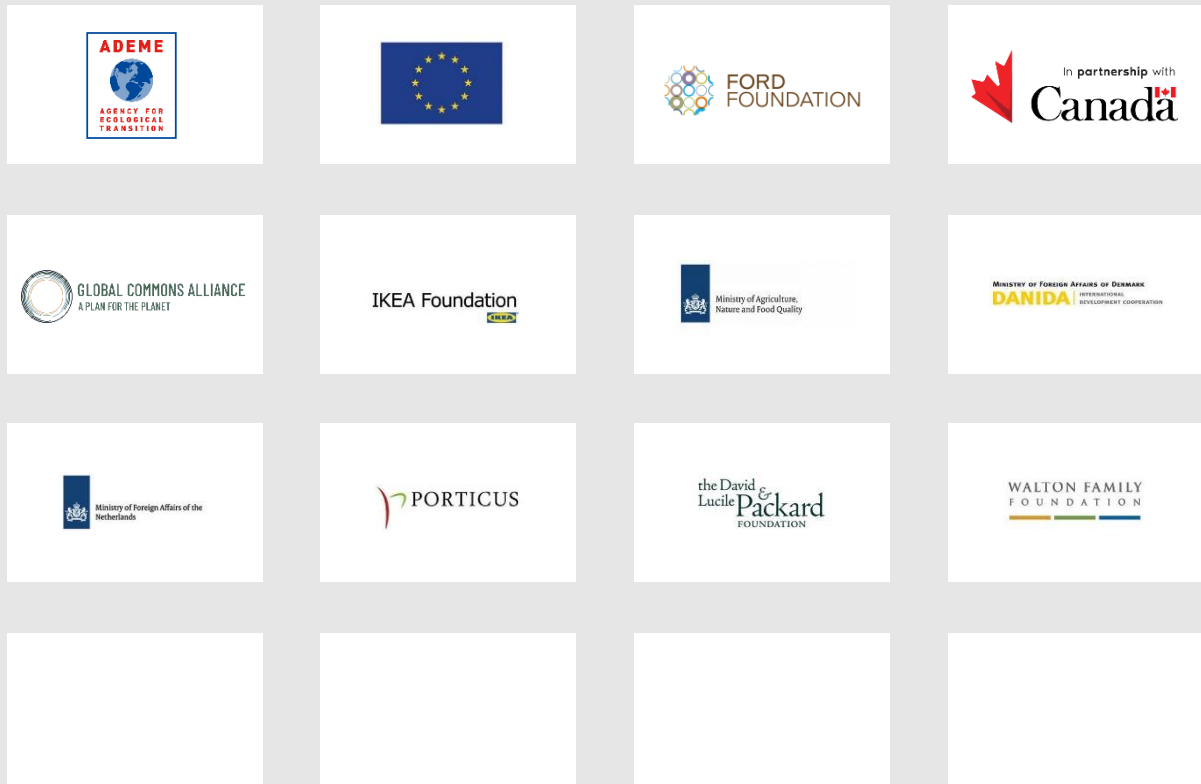


Rank	Urban Agglomeration	Country or area	Population 2022 ('000)	Population 2035 ('000)	Region
31	Dar es Salaam	Tanzania	7405	13383	Sub-Saharan Africa
32	Lima	Peru	11045	12972	Latin America & Caribbean
33	Moskva (Moscow)	Russian Federation	12641	12823	Europe & Central Asia
34	Bogota	Colombia	11344	12753	Latin America & Caribbean
35	Krung Thep (Bangkok)	Thailand	10900	12680	East Asia & Pacific
36	Ho Chi Minh City	Vietnam	9077	12236	East Asia & Pacific
37	Paris	France	11142	12065	Europe & Central Asia
38	Nanjing Jiangsu	China	9429	11506	East Asia & Pacific
39	Ahmadabad	India	8450	11295	South Asia
40	Chengdu	China	9479	11206	East Asia & Pacific
41	Surat	India	7784	10813	South Asia
42	Baghdad	Iraq	7512	10751	Middle East & North Africa
43	Tehran	Iran Islamic Rep.	9382	10664	Middle East & North Africa
44	London	United Kingdom	9541	10556	Europe & Central Asia
45	Kuala Lumpur	Malaysia	8420	10467	East Asia & Pacific
46	Xi'an Shaanxi	China	8538	10433	East Asia & Pacific
47	Seoul	Korea Rep.	9976	10286	East Asia & Pacific
48	Wuhan	China	8592	10038	East Asia & Pacific

Annex VI. Glossary

ESG	Environmental, Social and Governance
GDP	Gross Domestic Product
GRESB	Global Real Estate Sustainability Benchmark
HQ	Headquarter
IHRB	Institute for Human Rights and Business
ISO	International Organization for Standardization
LEED	Leadership in Energy and Environmental Design
NUA	New Urban Agenda
SDGs	Sustainable Development Goals
SDG2000	The 2,000 keystone companies to be measured by the WBA, that influences key business chain processes that impacts global achievement of the SDGs
UN	United Nations
UTB	Urban Transformation Benchmark
UTB390	The 300 companies to be measured in the UTB
WBA	World Benchmarking Alliance





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